Colorado School of Mines Trailhead
Channel Development Policy:
Work Flow, Requirements and Guidelines

Policy documents are posted at: http://acn.mines.edu/policies/trailhead/

Contact information: Trailhead/Portal Management Staff, trailhead@mines.edu

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I. *Introduction*

The Colorado School of Mines portal, Trailhead, provides a personalized intranet for students, faculty and staff of the university. There are three different methods of targeting content to portal users. Content can be delivered through Channels, Groups, and Targeted Announcements. This document contains guidelines for developing Channels for the portal.

Content in the portal is organized by a set of Tabs and Channels. Tabs are the basic organizational units of the portal. Channels constitute pieces of primary content below each tab of the portal. Channels are intended to deliver dynamic, high-demand content and interactive applications to a significant user base. To be "channel worthy" content generally should be more than just static information or links. (Also see the Tab Administrators' Policy http://acn.mines.edu/policies/trailhead/tabadminpolicy.pdf.)

The following requirements and guidelines acknowledge the importance of an open channel development structure, while recognizing the individual developer's responsibilities. Channel developers create and maintain the components of a university-wide, shared project whose audience consists of all students, faculty and staff members. It is for this reason that each channel should undergo appropriate preparation, careful development and extensive testing.

The portal is designed to support Channels delivered from a developer's web server, which may be a departmental server or the central CSM web server. Channels typically will not be placed on the portal server, but will be referenced by the URL to the developer's web server. Channels may be developed using any traditional web development tool such as Dreamweaver or FrontPage. There may be circumstances where Java servlets need to reside on the portal server to support a special function, but those are expected to be rare and must be discussed and approved in advance by the portal management staff.

Following is a detailed work flow for Channel development, a list of Channel requirements and a set of Channel guidelines. These are written for those who plan to develop content for portal channels.

For questions regarding this document, contact the portal management staff.

II.   *Channel Development*

Criteria for approval of channel request:

1.   Content should appeal to an audience larger than 100. A CSM Group ("Group Studio") can be created to deliver targeted content for smaller audiences. A channel that has wide appeal may be approved to be placed in the default view of one of the existing tabs.
1.   Content must not duplicate already available channels.
2.   Content should sensibly require creation of a new channel, rather than inclusion in an existing channel.
3.   Ability to maintain the channel over time (minimum of 1 year) should be apparent or a plan for transfer of maintenance should be included with the request.
4.   Web development capabilities must be assured by the requester (support for channel development is limited).
5.   Channel development specifications must be met.

Who is Eligible to develop portal channels?:

1.   Official Colorado School of Mines departments and programs are eligible to develop portal channels.
6.   Student organizations registered with ASCSM may request to develop a channel, but must first consult with the portal management staff.

Prior to contacting the portal management staff, review this document with the organization sponsor. The sponsor will be responsible for ensuring that the channel content resides on a stable web server, is maintained over time and is "channel worthy."

Training: Individual and group training for channel developers can be arranged. Please contact the portal management staff if you have questions about training.

III.   ***Channel Development Work Flow***

(See also, Appendix B – "Channel Development Resources")

Steps for adding a channel to the portal:

1.   Determine where the channel fits:

   ▪   If your proposed channel is appropriate for a large proportion of the campus population, you can request that it be added to the default view of an existing Tab. In this case, review the portal Tabs and determine which Tab your proposed channel most naturally falls under. In order for a channel to be added to one of the existing Tabs, it must be approved by the Tab Administrator. If the proposed channel is targeted to a smaller campus audience, request that it be added as a "subscription" channel.
   ▪   * If you have questions, contact the portal management staff or one of the Tab Administrators.

7.   Determine resources available and resources needed for developing your channel. (Campus provided support for channel development is limited.) For example, do you have or need:

   ▪   (You or your office) The skills to create a web page; special programming or scripting skills.
   ▪   Access to a web server and system permissions to put your files on the server.
   ▪   Web development software or tools.
   ▪   * If you have questions, contact your departmental computer support staff, the portal management staff, webmaster@mines.edu or one of the Tab Administrators.

8.   Submit initial request:

   ▪   Submit an electronic request using the Trailhead Developer's Admin Site [http://acn.mines.edu/trailhead/channeldevrequest.shtml]. You will be asked for a description of the channel and contact

information for the people involved in creating and maintaining your channel. Fill out the form as completely as possible. If you have questions contact the portal management staff. This request will go to the appropriate Tab Administrator or the portal management staff.

- You will be notified by email by the Tab Administrator when your channel request has been approved.

9. Develop your channel:

- Upon approval of your request by the Tab Administrator, begin to develop your channel. Adhere to the Channel Development Requirements and Guidelines listed below.
- Use your web server or the central CSM web server. Languages can be any language supported by the web server you will be using.
- Create a web page that will be displayed in a channel (as in in-line frame). The portal can support RSS and XML data feeds, so please inquire if you have that need.
- You are strongly encouraged to use a development server or web directory (versus production server/directory) for writing your channel. Once tested, plan to move it to your production server/directory. You can subsequently modify and test new versions of your channel on your development server without adversely affecting the production server (and thus negatively impacting the portal).

10. Submit your development Channel URL to the Tab Administrator and the portal management staff.

- Submit your channel URL and channel name.
- Channel is reviewed by the Tab Administrator.
- If your channel is approved, the Tab Administrator will submit a request to the Trailhead management staff. The portal system administrator will add the channel to the **portal development** server for the final phase of testing.
- You will be notified that your channel has been added to the development server and asked to begin your testing of your channel.

11. Test your channel through the **portal development** server.
12. Make needed changes and copy your file(s) to your production web server/directory.
13. Submit final channel URL:

- Once you are comfortable that your channel performs as expected and does not negatively impact the portal, notify the Tab Administrator that it is ready for production.

- The Tab Administrator submits a request to the portal system administrator to add the channel to the production server. Once added, the Tab Administrator will publish the approved channel and notify you. If desired, you can ask that a subscription channel be advertised in the "Trailhead News" channel.

14. Keep content current: Maintain the content in your channel and keep it "fresh". All portal content will be reviewed on a regular basis by the Portal Content Review committee.

*When a channel is added as a "Subscription" channel, it will not automatically appear on any Tab. Users will be required to use the Content Management tools to add it to the Tab of their choice. Ask the portal management staff about other methods of announcing the availability of your channel.

IV. ***Channel Building Tools***

To create a consistent look and feel, channel developers should link to the portal default style sheet [http://acn.mines.edu/trailhead/styles/stylesheet-portal.css], and avoid overriding these styles whenever possible. The default style sheet sets font colors, font sizes, margins, borders, and more for almost all HTML tags.

You can use existing channels as a model to help you develop your channel. To view the source code of an exiting channel, right click on an existing channel and select "View Source" (or "This Frame", "View Frame Source"). This method will work for most of the CSM developed Channels.

V. ***Channel Requirements***

All portal channels must adhere to the following requirements:

1. Portal channels must facilitate the official business of the School; support the vision, mission, goals, and traditional academic values of the School; and comply with university policies, rules, and regulations, and local, State, and Federal laws.

15. To enhance accessibility all portal channels must make use of the techniques and guidelines of the World Wide Web Consortium (W3C) Web Content Accessibility Guidelines 1.0 [http://www.w3.org/tr/wai-webcontent] and comply with Section 508 of the Federal Rehabilitation Act [http://www.section508.gov]. The following example illustrate a few proper techniques:

- HTML should be used to mark up content, while design and presentation should be achieved through style sheets. That is, a

heading 1 <h1> tag should be used on a level 1 heading of a document and not used merely to increase font size. A paragraph tag <p> should be used to delineate a paragraph of text, not to create extra space between two elements. Font size, font color, and the positioning of elements should all be accomplished with style sheets.

16.   Written permission must be obtained for use of copyrighted materials, with the clear understanding on the part of the copyright holder that these materials will be used in a channel within the School's portal on the Web. This applies to the use of text, logos, photographs, drawings, video clips, sound clips, and other copyrighted materials. Photos of Mines faculty and students at School-related events may be used. Photos of non-Mines-student minors can only be used with a written release, signed by a parent or guardian, authorizing the use of the child's image. Contact the Public Relations Office at 303-273-3326 for more information.

17.   Portal channels may not contain advertising, which means the promoting of a commercial product or service, whether or not compensation is exchanged or anticipated. Text links to commercial sites are strongly discouraged, with the exception of resources licensed by the School, but are not considered advertising when provided for informational purposes or as part of a comprehensive list of sources.

18.   Directory information of faculty, staff, and students may be included, but must be in compliance with the Family Educational Rights and Privacy Act (FERPA), which allows students the option of removing themselves. FERPA flags set in the campus database MUST be honored.

19.   Channels containing eCommerce (credit card transactions) must be in compliance with School fiscal procedures, while protecting the privacy of on-line customers. All eCommerce done under the auspices of the School must be pre-approved by Fiscal Services.

VI.   *Channel Guidelines*

The following guidelines should be considered when developing portal channels:

1.   Portal channels should follow the same graphic standards and undergo the same professional scrutiny and careful preparation that is given to any other official School publication, in any other medium, as these channels will present an image of the School to the portal users.

20.   Channels should adhere to the CSM Privacy Policy [http://inside.mines.edu/all_about/policy/csmprivacypolicyinfo.html].

21.   Channels should adhere to the Trailhead Design Guidelines
      [http://acn.mines.edu/policies/trailhead/designguide.pdf].
22.   For channels that incorporate any scripting language, a copy of the
      script(s) must be submitted to the portal management staff for review
      and approval.
23.   Channel developers should include their own mechanism for tracking
      the usage of their channel(s), as the statistics available within the
      portal are very limited.
24.   Materials should be carefully checked for proper grammar and spelling.
25.   Materials should be updated and maintained in a timely manner.
26.   Materials should be developed with proper regard for the generally
      observed principles of electronic etiquette ("netiquette"). For more
      information, visit http://www.albion.com/netiquette.

VII.   *Responsibilities of Users*

Users, including students, faculty, and staff, of Colorado School of Mines
computers, disk storages, networks, and other resources must adhere to the
Acceptable Use Policy for Computing and Networking Resources at Colorado
School of Mines [http://acn.mines.edu/policies/computerpolicies.html].

VIII.   *Related Links*

Document or Resource	Location
Trailhead Mission Statement	http://acn.mines.edu/policies/trailhead/mission.pdf
Trailhead Design Guidelines	http://acn.mines.edu/policies/trailhead/designguide.pdf
Channel Development Request Form	http://acn.mines.edu/trailhead/channeldevrequest.shtml
Channel Development Policy	http://acn.mines.edu/policies/trailhead/channeldevpolicy.pdf
Trailhead Content Review Policy	http://acn.mines.edu/policies/trailhead/reviewpolicy.pdf
List of Tab Administrators	http://acn.mines.edu/trailhead/tabadminslist.shtml
Tab Administrators' Policy	http://acn.mines.edu/policies/trailhead/tabadminpolicy.pdf
CSM Groups Policy	http://acn.mines.edu/policies/trailhead/CSMgroupspolicy.pdf
Targeted Announcements Policy	http://acn.mines.edu/policies/trailhead/announcepolicy.pdf
Default Portal Stylesheet	http://acn.mines.edu/trailhead/styles/stylesheet-portal.css

Appendix A. Tab Administrators List

Tab Name	Responsible Position	Email Address
Trailhead tab	Portal Administrator	trailhead@mines.edu
My Tab tab	Portal Administrator	trailhead@mines.edu
Teach/Advise tab	VP Academic Affairs	portal-teach-tab@mines.edu
Student Resources tab	Registrar	portal-student-tab@mines.edu
Campus Life tab	Director of Student Activities	portal-campuslife-tab@mines.edu
Employee Resources tab	VP Academic Affairs & VP Finance & Operations	portal-employee-tab@mines.edu
Research tab	VP Research	portal-research-tab@mines.edu
Subscription Channels	Portal Administrator	trailhead@mines.edu

Appendix B. Channel Development Resources

Tools and Resources	Examples
Web Development Software	Dreamweaver, FrontPage, etc.
Web Server Access and Directory	Need account(s), directory(s) and access permissions
Web Server software/tools	CGI capabilities, ASP, server-side include capabilities (SSI)
Training tools	Computer based training (CBT), 3rd party manuals, in-house assistance, etc.

	Roles/Responsibilities
Content Providers & Administrtors	**Channel Owner:** Has ultimate responsibility for the content and maintenance of the channel. May delegate or hire out other aspects of the channel development.
	Channel Programmer: Minimally should be able to create a web page (via web development tools, hand coding, etc).
	Channel Programmer/Advanced Web Developer: Has advanced web development skills (eg, java, javascript or CGI programming) and/or Database Admin skills.
	Channel Maintainer: Minimally should be able to edit a web page to maintain the content.
	Tab Administrators: Manage and oversee the layout of their tabs and the channels presented.
	Content Review Committee: Reviews Channels and Tabs to check to see that the content is up-to-date, relevant and appropriate.
	Portal Content Management: Manage, oversee and enforce the policies and procedures for portal content.
Server Managers	**Departmental or Campus Web Server Administrators:** Manage the web servers, permissions, account access, web space, etc for their respective servers.
	Portal Master, Portal Administrators, Portal Management Staff: Manage portal accounts/access, permissions. Interacts with the content administrators and provides services in support of publishing content on the portal.