CEAS Communicators
May 2012

Making the Most of Your Web Presence
It’s here!

New CEAS site launched April 2012
A few metrics

Old site
- Visits: 254,974
- Unique Visitors: 167,879
- Pageviews: 644,471
- Pages/Visit: 2.53
- Avg. Visit Duration: 00:02:17
- Bounce Rate: 51.68%

New site
- Visits: 13,255
- Unique Visitors: 5,910
- Pageviews: 17,717
- Pages/Visit: 1.34
- Avg. Visit Duration: 00:02:31
- Bounce Rate: 74.20%

Approx. 600 visitors/day
Approx. 510 visitors/day
A few more metrics

### Visits and Avg. Visit Duration by Country/Territory

<table>
<thead>
<tr>
<th>Country/Territory</th>
<th>Visits</th>
<th>Avg. Visit Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>11,264</td>
<td>00:02:44</td>
</tr>
<tr>
<td>India</td>
<td>302</td>
<td>00:01:13</td>
</tr>
<tr>
<td>China</td>
<td>192</td>
<td>00:02:42</td>
</tr>
<tr>
<td>Saudi Arabia</td>
<td>139</td>
<td>00:01:11</td>
</tr>
<tr>
<td>Iran</td>
<td>114</td>
<td>00:00:55</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>68</td>
<td>00:00:42</td>
</tr>
<tr>
<td>South Korea</td>
<td>66</td>
<td>00:00:48</td>
</tr>
<tr>
<td>Canada</td>
<td>60</td>
<td>00:00:43</td>
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<tr>
<td>Brazil</td>
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<td>00:00:53</td>
</tr>
<tr>
<td>France</td>
<td>46</td>
<td>00:00:38</td>
</tr>
</tbody>
</table>
CMS (Drupal) benefits

- Brand consistency
- Change once, display many
- Search for and overwrite files
- Flexible menu structure
- Sub-sites/microsites
- Integration with other CU-Boulder systems
CU-Boulder Brand Website

- [http://brand.colorado.edu](http://brand.colorado.edu)
- Contains information and guidelines about CU-Boulder brand messages and visuals
- Access to CU-Boulder logos and other digital assets for downloads
- Third-party links and frequently asked questions
- Archive of branded communications samples
Options for Website Development

• Static HTML development (old school)
  • Templates available via the downloads form on the brand website
• Content Management Systems
  • A variety of technologies (Wordpress, Joomla, etc.)
  • Hosting available via Managed Services (fee for service) or third-party providers ("the cloud")
• Campus-based Drupal Content Management System service
  • State-of-the-start web platform featuring robust content types and functionality (www NextGen)
  • University-provided enterprise-grade hosting (free of charge for campus units)
New University Web Presence

- **Phase I: Jan. 2012**
  Redesign of CU-Boulder’s main website & modernization of campus web infrastructure; custom website development via University Communications

- **Phase II: Summer/Fall 2012–Spring 2013**
  Campus-wide Content Management Platform service

- **Phase III: Summer 2013**
  Centralized server environment

- **Phase IV: Fall 2013**
  Online engagement hub
• How do you build a website for high performance?

  – CU-Boulder receives:
  
  – 4,000,000 visitors each month
  
  – 30,000,000 web page views each month
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Answer:
- Divide and conquer
- Separate the service into unique pieces
- Use standalone servers for each piece
F5: Web Traffic Management

- “Steers” web page requests to the correct backend service.

- Examples:
  - http://www.colorado.edu/
    - Send to Drupal
  - http://www.colorado.edu/parking/
    - Send to WWW legacy
    - (the original www site)
Varnish Web Caching

- Caches web content
- Improves web page performance by storing images and other media in fast RAM instead of slow disk
Web Servers
Drupal

– Manages web page content
– Sends back content as users request pages
MemCache

Database Caching

– Drupal makes heavy use of a database for managing content

– MemCache caches database requests to let Drupal render web pages faster
MySQL Database

– Stores Drupal configurations and content
An Army of Servers

– The new www.colorado.edu web infrastructure uses a total of 15 separate servers.

– High Performance
  • Fast page loads

– High Availability
  • The large number of servers is due to redundancy. A failure of any one server (or part of a server) should not bring the web site down.
Homepage Design

Research Collaboration Explores Biofuels and Biorefining

A grant awarded to the Colorado Center for Biorefining and Biofuels, or C2B2, will allow students to conduct research related to the conversion of biomass to fuels and chemicals. C2B2 is a joint renewable energy center of CU-Boulder, Colorado State University, Colorado School of Mines, the U.S. Department of Energy's National Renewable Energy Laboratory, and industry.
Homepage Website Features

- **Updated top-level navigation** to incorporate outreach, sustainability, international content areas
- **Audience-based navigation** for students, faculty/staff, parents, alumni (adding a business community link as well post-launch)
- **Tagging system** for organizing and distributing content
- **News, events, and social media feeds**
- **Multimedia integration**
- Integrated **campus scenic background photo** on all pages
Homepage Website Features

- Quick links to visitor information, academic department websites, and online services
- Persistent footer navigation with links to major units, services, health & safety, and community information
- Persistent links to giving opportunities, admission applications, and emergency alert sign-ups
www NextGen Phase II

“Shared Drupal”
WWW NextGen Phase II: Vision

The upgrade of CU-Boulder web technology through WWW NextGen is fundamentally changing the ways in which we design, build, implement and support campus-wide websites and related technologies....
WWW NextGen Phase II: Vision

Phase II of the www NextGen project—Shared Drupal—will bring dynamic website features and functionality to a broad cross-section of the campus, providing a self-service, fully supported website development resource that will enable users with little to no website expertise to build and maintain their own full-featured websites within the university’s enterprise-grade hosting environment…
WWW NextGen Phase II: Vision

Shared Drupal represents the university’s long-term commitment to providing centralized web services and support to the campus that will dramatically enhance the consistency and quality of CU-Boulder websites through a common user experience, functional foundation, and technical backend…
WWW NextGen Phase II: Vision

In order to deliver a successful Shared Drupal service to the campus, **we will deploy the service through multiple releases that deliver increasing features and functionality** over time:
WWW NextGen Phase II: Vision

2.1 We will begin by focusing on the creation of a BASIC web technology framework for the installation and production of Drupal websites, selecting a small set of campus stakeholders (8-10) who will follow an initial process/workflow (i.e., site request, Drupal install, training, production, ongoing support, etc.) and will provide input and feedback on the performance of the service.

(SUMMER 2012)
WWW NextGen Phase II: Vision

2.2 We will continue by rolling out a SHARED BASIC web technology framework, incorporating user stories based on feedback from our initial group of campus stakeholders and releasing the service in its shared hosting environment for the first time. We will also develop a product name for the service that will replace placeholders like “Common Good” and “Shared Drupal” and begin communicating to the campus at large about the development of the service. A second group of campus stakeholders (8-12) will be selected to use SHARED BASIC and will provide input and feedback on the performance of the service. (SUMMER/FALL 2012)
WWW NextGen Phase II: Vision

2.3 We will identify enhancements to SHARED BASIC to improve service performance and ensure the scalability of the service, incorporating user stories from the second group of campus stakeholders and releasing **SHARED ENHANCED** to a larger group of campus stakeholders (2-3 dozen) for additional input and feedback. At this release, the level of self-service automation in the process/workflow will be increased.

(LATE FALL 2012/WINTER 2013)
WWW NextGen Phase II: Vision

2.4 While continuing to enhance automation and validate/test the workflow associated with the rollout of Shared Drupal, we will develop a rollout / communications strategy to the campus at large, ultimately arriving at the first official release of the self-service CU-Boulder centralized web services website where campus entities can go to begin the process of diagnosing and meeting their web technology needs. (SPRING 2013)
What can I do now?

- Custom website development is available through University Communications, and our queue is filling for fall 2012.

- The opportunity to participate in our “Shared Drupal” releases during the fall 2012 semester exists for interested parties.

- We are contacting stakeholders this week for release 2.1 participation and are adding potential participants to a list based on types and complexity of websites.

- Static website development and the use of other CMS platforms can still be pursued through separate unit-based efforts.
Questions?

Sample websites:
http://drupaltemplates.colorado.edu

Contact:
jon.leslie@colorado.edu