

# Drupal Theme Development

Steven Wittens

February 26th, 2005  
FOSDEM, Brussels

# What I'll be talking about

- Overview of Drupal's theme system
- Making the FriendsElectric theme
- Clean, semantic XHTML/CSS with Drupal
- Examples of sexy Drupal sites

# How Drupal outputs HTML

- The content is fetched and output through *themable functions* ('push' model).
- Each themable function outputs the HTML for one item on the page (node, block, comment, item list, menu, ...)
- Each themable function can be overridden by the theme.

## Example themable function: block

```
function theme_block($block) {  
  $output = "<div class=\"block block-{$block->module}\"  
    id=\"block-{$block->module}-{$block->delta}\">\n";  
  $output .= " <h2 class=\"title\">{$block->subject}</h2>\n";  
  $output .= " <div class=\"content\">{$block->content}</div>\n";  
  $output .= "</div>\n";  
  return $output;  
}
```

- Ranges from simple HTML + PHP placeholders to more complicated logic.
- Note: semantic HTML and useful CSS IDs and classes

## Middle layer: theme engines

- Coding a theme in PHP directly is impractical
- A theme engine acts as a middle layer between Drupal and a theme consisting of loose templates.
- *XTemplate*: simple, single-template themes with only begin/end markers in HTML comments.
- *PHPTemplate*: several HTML/PHP files for templates. Best of both worlds: easy to edit, but powerful in abilities.
- Others: *PHPTal*, *Smarty*, ...

# Styling with CSS

- Every theme normally has its own stylesheet
- You can create new themes by building an alternate stylesheet for an existing template/theme.
- Drupal combines the HTML of the original template with the new CSS.
- This is made available as a separate selectable theme (with its own settings, links, screenshot).

# In practice

Theme	Engine (PHP)	Template (XHTML)	Style (CSS)
Pushbutton	XTemplate	.xtmpl	.css
Box Grey	PHPTemplate	.tpl.php	.css
Box Cleanslate			.css
Bluebeach		.css	
Chameleon		.css	
Marvin	Chameleon.theme		.css

# Directory structure

```
themes/engines/xtemplate/xtemplate.engine
```

```
themes/engines/phptemplate/phptemplate.engine
```

```
themes/pushbutton/xtemplate.tpl
```

```
themes/pushbutton/style.css
```

```
themes/box_grey/page.tpl.php
```

```
themes/box_grey/style.css
```

```
themes/box_grey/box_cleanslate/style.css
```

```
themes/bluebeach/page.tpl.php
```

```
themes/bluebeach/style.css
```

```
themes/chameleon/chameleon.theme
```

```
themes/chameleon/style.css
```

```
themes/chameleon/marvin/style.css
```



# Standard theme settings

- Toggle various page elements on/off
- Customize logo
- Set navigation links

## Toggle display

- Site name
- Site slogan
- Mission statement
- Primary links
- Secondary links
- User pictures in posts
- User pictures in comments
- Search box

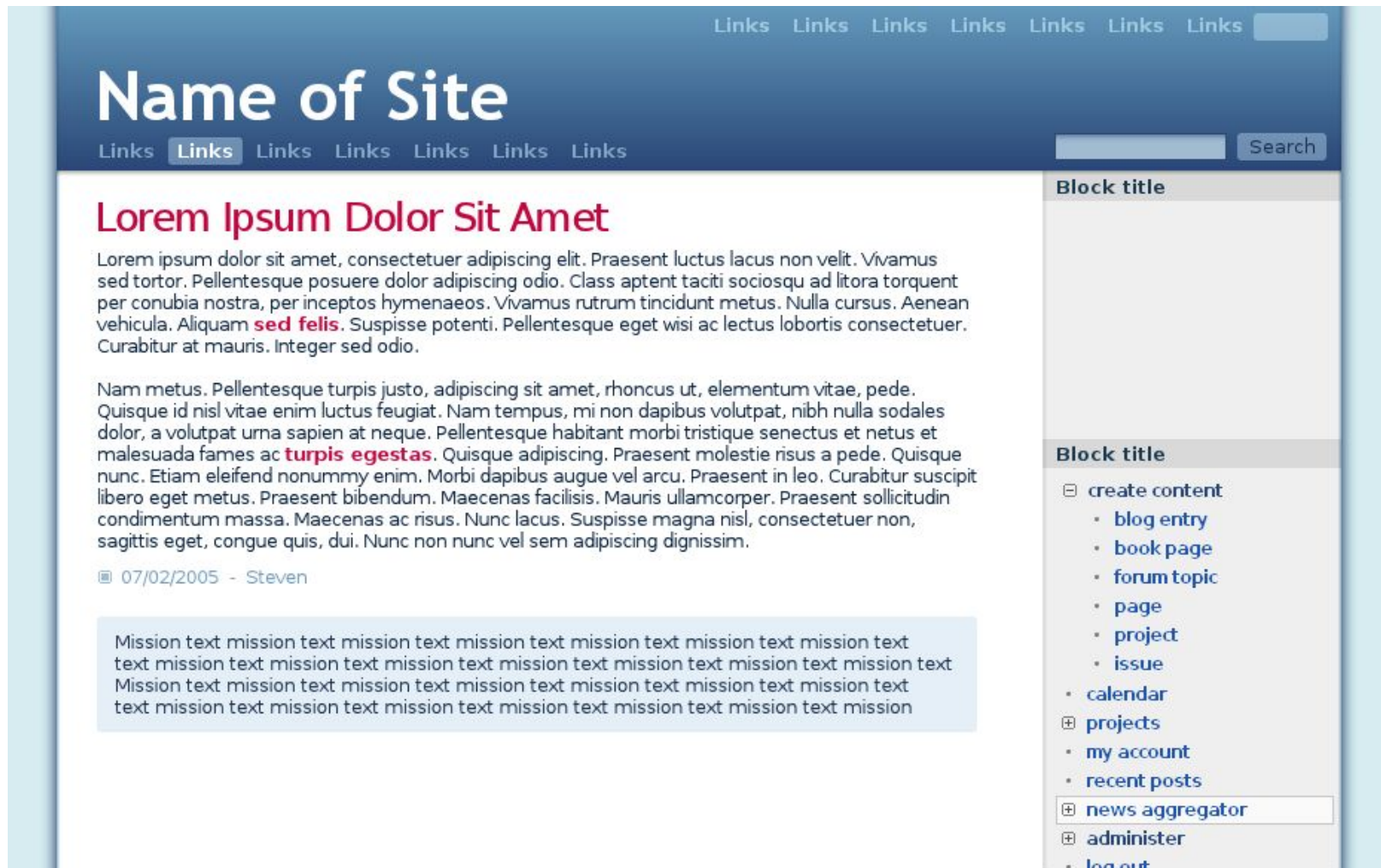
Enable or disable the display of certain page elements.

# Making the FriendsElectric theme

- PHPTemplate-based
- Tableless XHTML/CSS
- Supports 1-3 columns
- Supports theme options (logo, slogan, search box, navigation links, ...)

# Starting from a design/mockup

A lot of design choices still to be made (columns, footer, comments, forms, ...)



The screenshot shows a Drupal website layout with a dark blue header and sidebar. The main content area is white. The header contains the site name and navigation links. The sidebar contains a search box and a list of menu items.

**Header:** Links Links Links Links Links Links Links

## Name of Site

Links **Links** Links Links Links Links Links

Search

### Block title

**Lorem Ipsum Dolor Sit Amet**

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Praesent luctus lacus non velit. Vivamus sed tortor. Pellentesque posuere dolor adipiscing odio. Class aptent taciti sociosqu ad litora torquent per conubia nostra, per inceptos hymenaeos. Vivamus rutrum tincidunt metus. Nulla cursus. Aenean vehicula. Aliquam **sed felis**. Suscipis potenti. Pellentesque eget wisi ac lectus lobortis consectetur. Curabitur at mauris. Integer sed odio.

Nam metus. Pellentesque turpis justo, adipiscing sit amet, rhoncus ut, elementum vitae, pede. Quisque id nisl vitae enim luctus feugiat. Nam tempus, mi non dapibus volutpat, nibh nulla sodales dolor, a volutpat urna sapien at neque. Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac **turpis egestas**. Quisque adipiscing. Praesent molestie risus a pede. Quisque nunc. Etiam eleifend nonummy enim. Morbi dapibus augue vel arcu. Praesent in leo. Curabitur suscipit libero eget metus. Praesent bibendum. Maecenas facilisis. Mauris ullamcorper. Praesent sollicitudin condimentum massa. Maecenas ac risus. Nunc lacus. Suscipis magna nisl, consectetur non, sagittis eget, congue quis, dui. Nunc non nunc vel sem adipiscing dignissim.

07/02/2005 - Steven

Mission text mission text mission text mission text mission text mission text mission text  
text mission text mission text mission text mission text mission text mission text mission text  
Mission text mission text mission text mission text mission text mission text mission text  
text mission text mission text mission text mission text mission text mission text mission

### Block title

- create content
  - blog entry
  - book page
  - forum topic
  - page
  - project
  - issue
- calendar
- projects
  - my account
  - recent posts
- news aggregator
- administer
  - log out

# Build a skeleton page template

- Make a `page.tpl.php` containing a skeleton HTML document
- Focus on layout first: CSS positioning (google for a good layout template to start from)

```
<?php if ($search_box): ?>
<form action="<?php print url("search") ?>" method="post">
  <div id="search">
    <div>
      <input class="form-text" type="text" size="15" value="" name="search">
    </div>
  </div>
</form>
<?php endif; ?>
```

# Add more templates for specific items

- Theming a node: node.tpl.php

```
<div class="node<?php print ($sticky) ? " sticky" : ""; ?>">
  <?php if ($page == 0): ?>
    <h2><a href="<?php print $node_url ?>" title="<?php print $title ?>"><?ph
  <?php endif; ?>
  <?php print $picture ?>

  <div class="info"><?php print $submitted ?><span class="terms"><?php print
  <div class="content">
    <?php print $content ?>
  </div>
  <?php if ($links): ?>
    <?php if ($picture): ?>
      <br class='clear' />
    <?php endif; ?>
    <div class="links"><?php print $links ?></div>
  <?php endif; ?>
</div>
```

# FriendsElectric Layout

Logo

**Name of Site**

Slogan

Link #Link #Link #Link #

Link #Link #Link #Link #

Link #Link #Link #Link #

Search

**Steven**

- ▶ create content
- ▶ projects
- ▣ my account
- ▣ recent posts
- ▶ news aggregator
- ▶ administer
- ▣ log out

**Recent comments**

- [azteaze](#)  
16 weeks 5 days ago
- [test](#)  
20 weeks 16 hours ago
- [This is a longer comment](#)  
21 weeks 2 hours ago
- [ytee](#)  
24 weeks 2 days ago

The theme garden's goal is to fry the brains of its visitors by sending out dangerous high-energy gamma radiation through carefully crafted CSS.

**Donec felis eros, blandit non**

Morbi id lacus. Etiam malesuada diam ut libero. Sed blandit, justo nec euismod laoreet, nunc nulla iaculis elit, vitae. Donec dolor. Class aptent taciti sociosqu ad litora torquent per conubia nostra, per inceptos hymenaeos. Vivamus vestibulum felis nec libero. Duis lobortis. Cum sociis natoque penatibus et magnis dis parturient montes, nascetur ridiculus mus. Nunc venenatis pretium magna. Donec dictum ultrices massa. Donec vestibulum porttitor purus. Mauris nibh ligula, porta non, porttitor sed, fermentum id, dolor. Donec eu lectus et elit porttitor rutrum. Aenean justo. Phasellus augue tortor, mattis nonummy, aliquam euismod, cursus eget, ipsum. Sed ultricies bibendum ante. Maecenas rhoncus tincidunt eros.

We are pleased to announce that the Drupal 4.5.0 release candidate is available. A list of the major changes can be found in the [CHANGELOG file](#). We fixed most pressing issues during the code freeze, so we'd like you to help polish this release and to help iron out the remaining issues: your comments on the stability, correctness and performance of this release candidate are more than welcome!

[Steven](#) – Fri, 08/20/2004 – 04:44  
[narr narr](#)  
[3 comments](#)

**aaaaaaaaaaaaa**

aaaaaaaaaaaaaaa

[Steven](#) – Tue, 02/22/2005 – 06:47  
[add new comment](#)



## Dynamic CSS classes

- Problem: A theme can have a sidebar on either side, or both at the same time.
- Requires 4 different positioning scenarios (so empty sidebars don't take up space)
- CSS class name changes depending on `$layout`:  
'content-none', 'content-left', 'content-both',  
'content-right'.

```
<div id="content" class="content-<?php print $layout ?>">
```

# Overriding specifics

- PHPTemplate offers a minimal set of base templates: page, node, comment, block.
- To override a themable function not in this list, you need to provide a template wrapper:

```
function phptemplate_item_list($items = array(), $title = NULL) {  
    return _phptemplate_callback('item_list',  
        array('items' => $items, 'title' => $title)  
    );  
}
```

- This wrapper will run the template `item_list.tpl.php`



# Putting it all together

Link # Link # Link # Link #

## Name of Site

Link # Link # Link # Link #

### Categories

- [test test test \(2\)](#)  
22 hours 19 min ago
- [narr narr \(1\)](#)  
26 weeks 5 days ago

### Steven

- ⊕ [create content](#)
- ⊕ [projects](#)
- [my account](#)
- [recent posts](#)
- ⊕ [news aggregator](#)
- ⊕ [administer](#)
- [log out](#)

The theme garden's goal is to fry the brains of its visitors by sending out dangerous high-energy gamma radiation through carefully crafted CSS.

## Donec felis eros, blandit non

Morbi id lacus. Etiam malesuada diam ut libero. Sed blandit, justo nec euismod laoreet, nunc nulla iaculis elit, vitae. Donec dolor. Class aptent taciti sociosqu ad litora torquent per conubia nostra, per inceptos hymenaeos. Vivamus vestibulum felis **nec libero. Duis lobortis**. Cum sociis natoque penatibus et magnis dis parturient montes, nascetur ridiculus mus. Nunc venenatis pretium magna. Donec dictum ultrices massa. Donec vestibulum porttitor purus. Mauris nibh ligula, porta non, porttitor sed, fermentum id, dolor. Donec eu lectus et elit porttitor rutrum. Aenean justo. Phasellus augue tortor, mattis nonummy, aliquam euismod, cursus eget, ipsum. Sed ultricies bibendum ante. Maecenas rhoncus tincidunt eros.

*We are pleased to announce that the Drupal 4.5.0 release candidate is available. A list of the major changes can be found in the **CHANGELOG file**. We fixed most pressing issues during the code freeze, so we'd like you to help polish this release and to help iron out the remaining issues; your comments on the stability, correctness and performance of this release candidate are more than welcome!*

- ▣ Steven - Fri, 08/20/2004 - 04:44
- ▣ narr narr
- ▣ 3 comments

**aaaaaaaaaaaa**

### Recent comments

- [azteaze](#)  
16 weeks 5 days ago
- [test](#)  
20 weeks 16 hours ago
- [This is a longer comment](#)  
21 weeks 2 hours ago
- [yteee](#)  
24 weeks 2 days ago

# Many things to theme

**test** new

test test test

**Steven** - Tue, 10/05/2004 - 12:13

**delete** - **edit** - **reply**

## Donec felis eros, blandit non

**view**

**edit**

**outline**

Morbi id lacus. Etiam malesuada diam ut libero. Sed bla

We are pleased to announce that the  
release candidate is available.  
A list of the major changes can be

**Steven**

- create content**
- projects**
  - **my account**
  - **recent posts**
- news aggregator**
- administer**
  - **access control**
  - **aggregator**
  - **blocks**
  - **categories**
  - **comments**
- content**
  - **forums**
  - **input formats**
  - **logs**
  - **modules**

## People who will attend the Drupal conference at FOSDEM 2005

**Steven**  
Steven Wittens  
<http://www.acko.net/>  
Belgium

**camworld**  
Cameron Barrett  
<http://www.camworld.com>  
United States

**ec**  
Eric Charikane  
France

**jvandyk**  
John VanDyk  
<http://www.public.iastate.edu/~jvandyk/>  
United States

**chx**  
Károly Négyesi  
Hungary

**Bèr Kessels**  
Bèr Kessels  
<http://www.webschuur.com>  
Belgium

dikini

Bart Jansens

Type ▲	Date	Message	User	Operations
search	22/02/2005 - 06:46	Search: <i>drupal</i> (users).	Steven	results details
search	22/02/2005 - 06:46	Search: <i>drupal</i> (content).	Steven	results details
search	22/02/2005 - 06:45	Search: <i>drupal</i> (content).	Steven	results details
search	22/02/2005 - 06:45	Search: <i>drupal</i> (content).	Steven	results details
	22/02/2005	Search: <i>drupal</i>		

## Clean XHTML/CSS

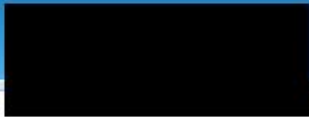
- Yes, but with some caveats:
- Most CSS work today is being made for static / blog-like sites. Drupal's content has fieldsets, tables, pre, ...
- Most theme functions output semantic XHTML: on-going work to clean up the themable functions.
- Rich styling: many CSS classes and IDs to style specific parts of the page.

# Drupal or not?

- Pop-quiz:  
Are the following sites Drupal-based or not?



# Drupal or not?

[Support](#)[Downloads](#)[Handbook](#)[Contribute](#)[Forums](#)[Contact](#) 

Join us at the:



**Conference  
Brussels, 2005**

[Click for more info](#)

██████████ is the official website of ██████████, an open source **content management platform**.

Equipped with a powerful blend of features, ██████████ can support a variety of websites ranging from personal weblogs to large community-driven websites.

More:

▶ [About ██████████](#)

▶ [██████████ sites](#)

▶ [Features](#)



## Download

Latest release:

██████████ **4.5.2**

Contributions:

**Modules**

**Themes**

**Translations**

## ██████████ 4.5.2 released

**Dries** - January 15, 2005 - 10:00

**News and announcements**

The ██████████ project has released version 4.5.2 of its open-source content management platform. ██████████ 4.5.2 is a maintenance release that provides corrections of problems reported using the bug tracking system. ██████████ 4.5.2 fixes a cross-site scripting (XSS) vulnerability so it is recommended that you upgrade your existing ██████████ sites. There are no new features in this installment. For more information about the ██████████ 4.5.x release series, please consult the ██████████ [4.5.0 release announcement](#) and the ██████████ [4.5.1 release announcement](#). For more information about the ██████████ 4.5.2 release in particular, read on.

» [read more](#)

## Steven

- ▣ [CVS messages](#)
- ▶ [create content](#)
- ▶ [projects](#)
- ▣ [my account](#)
- ▣ [recent posts](#)
- ▶ [news aggregator](#)
- ▶ [administer](#)
- ▣ [log out](#)

## Forum topics

# Drupal or not?



CAM OCAĞI

ANASAYFA

ENGLISH TÜRKÇE

CAM OCAĞI  
DESTEK BEKLİYOR!



ATEŞ TUR



BRITISH COUNCIL  
Turkey



Government  
of Canada

*Çarakhale Seramik*  
**Kalebodur**



CAM OCAĞI  
EĞİTİM

2005 PROGRAMI

BAŞVURU

ULAŞIM VE İLETİŞİM

- Kampüs
- Üretim
- Teknik Olanaklar
- Alışveriş



**Hayallerinizi Şekillendirin**

Cam Ocağı'nın yeni dönem atölyeleri ve eğitimleri için kayıtlar başladı.

**Kampüs Düzeni**

**Kampüse Varış**

Cam Ocağı'na varış Cumartesi, ayrılış ise Pazar günü olmak üzere düzenlenmiştir. Ulaşım ve zamanlama ile ilgili ayrıntılı bilgi, kayıtları tamamlanan öğrencilere ayrıca sunulacaktır.



Kampüs Girişi

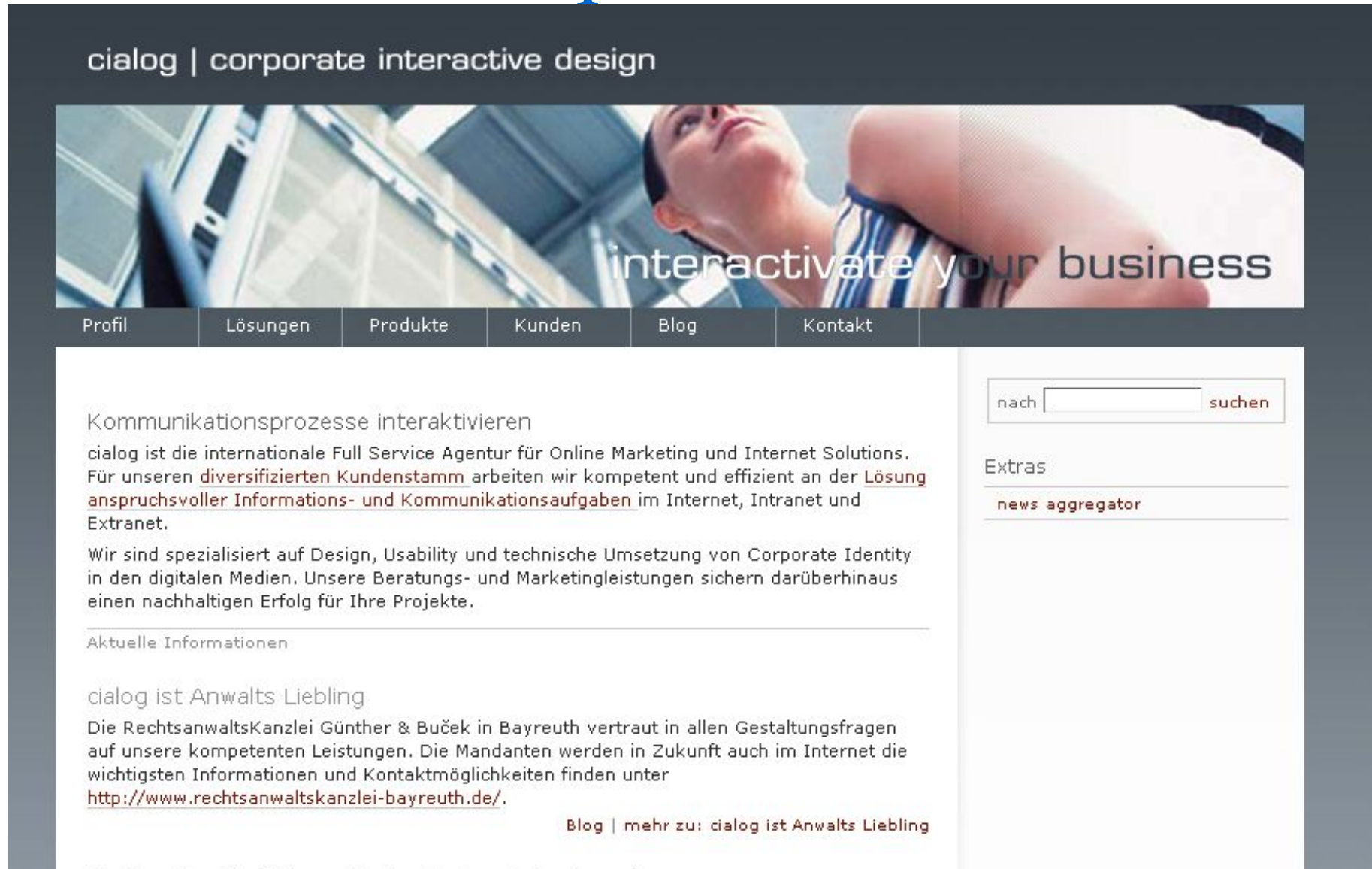
**Foto Galeri**




Erkan Mumcu Cam Ocağında

Kültür ve Turizm Bakanı Erkan

# Drupal or not?



cialog | corporate interactive design



interactivate your business

Profil   Lösungen   Produkte   Kunden   Blog   Kontakt

Kommunikationsprozesse interaktivieren

cialog ist die internationale Full Service Agentur für Online Marketing und Internet Solutions. Für unseren diversifizierten Kundenstamm arbeiten wir kompetent und effizient an der Lösung anspruchsvoller Informations- und Kommunikationsaufgaben im Internet, Intranet und Extranet.

Wir sind spezialisiert auf Design, Usability und technische Umsetzung von Corporate Identity in den digitalen Medien. Unsere Beratungs- und Marketingleistungen sichern darüberhinaus einen nachhaltigen Erfolg für Ihre Projekte.

Aktuelle Informationen

cialog ist Anwalts Liebling

Die Rechtsanwaltskanzlei Günther & Buček in Bayreuth vertraut in allen Gestaltungsfragen auf unsere kompetenten Leistungen. Die Mandanten werden in Zukunft auch im Internet die wichtigsten Informationen und Kontaktmöglichkeiten finden unter <http://www.rechtsanwaltskanzlei-bayreuth.de/>.

Blog | mehr zu: cialog ist Anwalts Liebling

nach  suchen

Extras

news aggregator



# Drupal or not?



The screenshot shows the website [terminus1525.ca](http://terminus1525.ca). The top navigation bar includes links for FEATURES, EXHIBITS, STUDIOS, FORUMS, and ABOUT. A language selector is set to "français". On the right side, there are buttons for "Register" and "Log In".

The main banner features a stylized orange robot on the left and the text "interview JOSEPH LAZARE" in large yellow letters on a dark background. Below the banner, there is a search bar with a "KEYWORDS" input field and a search button. To the right of the search bar is an "ADVANCED SEARCH" link. Below the search bar is a "TERMINUS STATS" section with three columns: "STUDIOS" (1706), "ARTWORK" (7462), and "FORUM POSTS" (608). Below the stats is a "NEWSLETTER" section with "SUBSCRIBE" and "UNSUBSCRIBE" radio buttons and an "EMAIL" input field.

The "NEWS" section on the right contains a list of recent news items:

- **Feature: Interview with the Hidden Cameras**
- **terminus1525.ca featured as ZeD's Site of the Week (01.11.04 - 07.11.04)**
- **Feature: Interview with Joseph Lazare**
- **New Call for Submissions for Action | Reaction**
- **Feature: Interview with Renaud Lacelle-Bourdon**
- **Workshop: textperimentation**
- **Exhibit: Unimagined Canada online**
- **Feature: Interview with David Yonge**

At the bottom of the page, there is a secondary navigation bar with links for FEATURES, EXHIBITS, STUDIOS, FORUMS, ABOUT, LOGIN, REGISTER, and SEARCH. A "LAUNCH RADIO TERMINUS" button with a play icon is also present.

# Drupal or not?



**Blog with DiaryLand**  
Easy, powerful and fun weblogs 1.8 million users can't be wrong  
[diaryland.com/](http://diaryland.com/)

**Blog Gratis Free Blog**  
6 lingue RSS pronto in un minuto 6 languages RSS ready in one minute  
[www.makemyblog.info](http://www.makemyblog.info)

**GrokAds**  
Have a website or blog? Start selling text ads on your site  
[www.grokads.com](http://www.grokads.com)

Annunci Goooooogle

**negen**

Home Blog Temi Drupal Info Cerca Icons Fluid

Indice alfabetico Mappa del sito Fotolog Links Login Contatti

**Sei il nuovo fidanzato di Julia Roberts?**

Drupal media module

Un bel modulo per drupal che permette di gestire file video, audio e playlist. Tra le caratteristiche principali:

- Usa getID per leggere e memorizzare i metadati dei file multimediali caricati via upload.module.
- Visualizzazione dei metadati in forma tabellare per ogni file audio e video
- Introduce un nuovo tipo di nodo il media-playlist node

Gli utenti possono creare delle playlist a partire da file audio e video esistenti sia creando un nodo di tipo playlist e aggiungendo file sia creando una *session playlist* che persisterà per tutto il tempo in cui un utente rimane connesso. Le session playlist possono essere convertite in nodi reali in qualsiasi momento.

VOTA IL SITO | VOTE HERE

**AV Hosted By sito...**

NAVIGAZIONE

- blogs
- site map
- ultimi messaggi
- most popular content

BLOGROLL

# Drupal or not?



search spreadfirefox:

[Spread the word](#) [Make a donation](#) [Volunteer](#) [Forums](#) [FAQ](#) [My Page](#)

Username:

Password:

[Sign up!](#)  
[Forgot your password?](#)




## Forums

- [Marketing Ideas](#)
- [Community Marketing Projects](#)
- [Thunderbird Forums](#)
- [SFX.com-related Forum forums](#)

## Top Posts

## Who's new

- [kitscave](#)
- [kissmeh](#)

 **Spreading Fire:** Our most recent button referral comes from **rtafoya** (sfx page). Great work!

## Coin winners will be notified shortly

Posted by [sfx team](#) on Tue, 02/22/2005 - 11:05 :: [Personal](#)

Hi all, No worries—we haven't e-mailed the 25 coin winners yet. We'll be doing so shortly. Thanks for your patience. —the sfx team

[sfx team's blog](#) | [7 comments](#) | [trackback url](#)

## On the recent Spread Firefox downtime

Posted by [factoryjoe](#) on Tue, 02/22/2005 - 01:43 :: [Personal](#)

I wanted to post briefly to let you all know that we're actively working to upgrade and improve the performance of Spread Firefox so that, moving forward, we have a robust setup to weather our continued success and growth.



In particular, the Mozilla system admins and Scott Kveton from [OSL](#) have been doing a great job watching the situation and giving our server a jumpstart every time it hiccups (which has been frequent as of late).

To remedy the problem, Scott is actually working on moving Spread Firefox to a new hardware configuration that should take care of the problems for good.



Firefox 1.0  
**25,241,830**  
Downloads

## Tell the World What You Think

Head on over to [c|net download.com](#) and [submit your feedback](#) about Firefox. It only takes two minutes.

## Spot the Fox! The Spread Firefox Community Gallery





# Conclusion

- Sexy Drupal sites are already here
- Drupal themes are flexible and powerful
- Caters to various skill sets with CSS-only or templated themes
- Accessible to designers

## More?

- Theme showcase: *Drupal Theme Garden* (Bèr Kessels)  
<http://webschuur.drupaldevs.org/>
- This presentation:  
<http://www.acko.net/drupalcon>
- Any questions?

