CMSs, Open Source, Hosted & Cloud-Based Applications
Content Management Systems

- Fast, easy, lower cost ways to create and maintain information on the web
- Alternatives to build
Types of CMSs

- Portals
- Blogs
- E-commerce
- Intranets / Groupware
- Discussion boards
- Guestbooks
- Mailing lists
- E-learning
- Image galleries
- Wikis
- Calendars
- Customer relationship management (CRM)
- Document workflow management
- Polls and surveys
- Project management
Architecture of a typical CMS

- **Programming**
  - PHP, PERL, Java, VB.NET, ASP.NET, Plone

- **Database**
  - E.g. MySQL, PostgreSQL, Oracle, SQL Server

- **Display**
  - HTML, Cascading Style Sheets (CSS)

- **Content**
  - User generated
CMS Benefits - Features

• Comes with immediate capabilities, e.g.
  • Calendaring
  • Document management
  • Authentication
  • Membership management
  • And other functions from previous slide

• Easy to install
• Easy to update
• External support can be hired for problems
CMS Benefits - Sustainability

- **Content**
  - Updateable by user organization
  - Without requiring HTML skills

- **Display**
  - Typically have templates to choose from
  - More customized look can be done once

- **Programming / Database**
  - Updated regularly by vendor, or FOSS community
  - Specialized help can be hired for only these upgrades
WordPress

- pcc.palau.edu
- pitt.cisvusa.org
  - Theme from themeforest.com
- sapen.org
- palaufiu.org
- rmibankingcomm.org
Education example

- Moodle - deployed by student consultants:
  - (Like Blackboard)
  - Local elementary school
  - Cook Islands Ministry of Education
Commercial CMSs

• Benefits of Commercial CMS
  – More consistent help-desk support

• E.g. Atlassian Confluence
  • $$$
  • Used by Facebook, Skype, Microsoft, Adobe, and others.

• E.g. Microsoft Sharepoint
  – Full functioned
  – But a confusing and potentially expensive set of requirements
Levels of hosting service

- Own server
- Web hosting service
- Application hosting
  - I.e. Software as a Service (SaaS)
Own server

- Can run any FOSS or commercial software you like
- Often higher total-cost-of-ownership
- Higher security risk
  - If fall behind with software updates
Hosting service

- Low monthly or yearly fees
  - DreamHost.com – free for 501(c)3 orgs
- No server maintenance required
- Install your own applications
  - Requires expert knowledge to update
- With application installation support
  - Update (mostly) works without expert knowledge
## DreamHost 1-Click Installs

<table>
<thead>
<tr>
<th>Application</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MediaWiki</td>
<td>Wiki software; free collaborative software.</td>
</tr>
<tr>
<td>WordPress</td>
<td>Web-based software that can be used to create a website or blog.</td>
</tr>
<tr>
<td>concrete5</td>
<td>Website building tool simple for site owners to use, powerful for developers.</td>
</tr>
<tr>
<td>dotProject</td>
<td>Web-based Project Management app designed to provide project layout and control.</td>
</tr>
<tr>
<td>Joomla!</td>
<td>Free, open-source CMS for publishing content on the internet.</td>
</tr>
<tr>
<td>MICO</td>
<td>Web-based application to assist small companies with tracking inbound calls.</td>
</tr>
<tr>
<td>MICO - Mantis</td>
<td>Web-based application to assist small companies with tracking outbound calls.</td>
</tr>
<tr>
<td>MODx Evolution</td>
<td>Has empowered developers and enthusiasts to build websites exactly how they wish since 2008.</td>
</tr>
<tr>
<td>OpenVox</td>
<td>Web-based, open source phone system for business.</td>
</tr>
<tr>
<td>Omeka</td>
<td>Open source web-publishing platform for museum, library, &amp; archive collections.</td>
</tr>
<tr>
<td>Open Web Analytics</td>
<td>Open source web analytics software that you can use to track and analyze your web.</td>
</tr>
<tr>
<td>PhpGedView</td>
<td>Free PHP-based web application for working with genealogy data.</td>
</tr>
<tr>
<td>Piwik</td>
<td>Open source alternative to Google Analytics.</td>
</tr>
<tr>
<td>Pligg</td>
<td>Open source content management system designed to mimic the functionality of Node.js.</td>
</tr>
</tbody>
</table>
DreamHost Install WordPress

DreamHost One-Click Installer

WordPress Version: 3.5.1

Author: WordPress

WordPress is an open source content management system (CMS), often used as a blog publishing application, powered by PHP and MySQL. It has many features including a plug-in architecture and a template system. Used by over 12% of the 1,000,000 biggest websites, WordPress is the most popular CMS in use today.

Average Rating: ★★★★★ (83 ratings)

Tags: Blog, CMS, Featured

Custom Installation

Custom One-Click Installer

Install to: Select a domain /

Select Database: Automatically Create Database

Deluxe Install

Install it for me now!
Updates within WordPress

WordPress Updates

Important: before updating, please back up your database and files. For help with updates, visit the Updating WordPress Codex page.

An updated version of WordPress is available.

You can update to WordPress 3.5.1 automatically or download the package and install it manually:

Update Now  Download 3.5.1

While your site is being updated, it will be in maintenance mode. As soon as your updates are complete, your site will return to normal.

Plugins

The following plugins have new versions available. Check the ones you want to update and then click “Update Plugins”.

Update Plugins
SaaS (Application hosting)

- Often per-user subscription fees
  - May have entry-level free accounts
- No maintenance fees
- No maintenance expertise required
- They support the application
East Liberty Development Inc.

- Non-profit Community Development Corporation
- Does real estate development
- Needed a way to coordinate project management while rehabilitating multiple properties
- Used hosted solution Ace Project – aceproject.com
SalesForce

• Hosted Customer Relationship Management (CRM) application
  – I.e.
    • Keeping track of donors
    • Keeping track of clients or constituents
    • Keeping track of members

• SalesForce Foundation
  – Provides free licenses to qualifying U.S. non-profit organizations
  – So no server, no software, no maintenance needed

• Lock-in risk:
  – currently expected to be free forever.
  – All data can be exported as a Comma Separated Value (CSV) file
Google for Nonprofits

- http://google.com/nonprofits
- Features
  - Gmail
  - Google Calendar
  - Google Drive
  - Google Docs / Sheets
  - Google Ads
- Free