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, JavaScript

• Database
  – E.g. MySQL, PostgreSQL, Oracle, SQL Server, MongoDB

• 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 or Canvas)
  - 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><strong>MediaWiki</strong></th>
<th><strong>WordPress</strong></th>
<th><strong>concrete5</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>MediaWiki, the software behind Wikipedia, is free collaborative software.</td>
<td>WordPress is a free web-based software you can use to create a website or blog.</td>
<td>concrete5 is a website building tool that is simple for site owners to use, and powerful for site developers to work with.</td>
</tr>
<tr>
<td>Wiki, Featured</td>
<td>Blog, CMS, Featured</td>
<td>CMS, Forum</td>
</tr>
<tr>
<td><strong>dotProject</strong></td>
<td><strong>Gallery</strong></td>
<td><strong>GetSimple CMS</strong></td>
</tr>
<tr>
<td>dotProject is a web-based Project Management app designed to provide project layout and control functionality.</td>
<td>Gallery is a feature-packed, open-source photo gallery.</td>
<td>GetSimple is an XML based lite Content Management System.</td>
</tr>
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<td></td>
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<td>CMS</td>
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<tr>
<td><strong>Joomla!</strong></td>
<td><strong>MICO</strong></td>
<td><strong>MODx Evolution</strong></td>
</tr>
<tr>
<td>Joomla! is a free, open-source CMS for publishing content on the Internet.</td>
<td>MICO is a simple web-based application to assist small companies with tracking inbound calls.</td>
<td>MODX Evolution has empowered developers and enthusiasts to build websites exactly how they wish since 2008.</td>
</tr>
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<td></td>
<td>Other</td>
<td>CMS</td>
</tr>
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<td><strong>Moodle</strong></td>
<td><strong>Omeka</strong></td>
<td><strong>Open Web Analytics</strong></td>
</tr>
<tr>
<td>Moodle is an open-source CMS designed to help educators create interactive online courses.</td>
<td>Omeka is a free, flexible, &amp; open source web-publishing platform for museum, library, &amp; archive collections &amp; CMS</td>
<td>Open Web Analytics (OWA) is open source web analytics software that you can use to track and analyze your web traffic.</td>
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<td>Statistics</td>
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<td><strong>OpenVox</strong></td>
<td><strong>phpBB</strong></td>
<td><strong>PhpGedView</strong></td>
</tr>
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<td>OpenVox is a web-based, open source phone system for business.</td>
<td>phpBB allows users to create bulletin boards on their site where members can express their hearts &amp; minds. Communication, Forum</td>
<td>PhpGedView is a free PHP-based web application for working with genealogy data.</td>
</tr>
<tr>
<td>VoIP, Communication</td>
<td></td>
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<td><strong>Piwigo</strong></td>
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<td><strong>Pligg</strong></td>
</tr>
<tr>
<td>Piwigo is an open source photo gallery, customize it with themes and plugins.</td>
<td>Piwik is an open source alternative to Google Analytics.</td>
<td>Pligg is an open source content management system designed to mimic the functionality of Nucleus.</td>
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DreamHost Install WordPress

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

Last checked on February 6, 2013 at 2:16 am. Check Again

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
G Suite for Nonprofits

- [http://google.com/nonprofits](http://google.com/nonprofits)
- **Features**
  - Gmail
  - Google Calendar
  - Google Drive
  - Google Docs / Sheets
  - Google Ads
- **Free**
Wix / Squarespace

• Web site design, editing, and management as a service.
• E.g. tcingc.org