WordPress Multi-User: BuddyPress and Beyond

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WordPress is a useful way of understanding the world we live in*

* I explain myself in the notes to these slides
Technically, WordPress Multi-User is 99% the same as WordPress.
‘BuddyPress’ is just a set of plugins for WordPress Multi-User.

No big deal.
BuddyPress: Social Network
Blogs: Websites (optional)
WPMU: Administration
Posts = dynamic content
Pages = static content
Categories = formal taxonomy
Tags = informal taxonomy
Widgets = versatile miscellany
Members = Find people
Groups = Identify with others
Activity = Track site-wide activity
Friends = Connect with peers
Messaging = Email
Wire = Message board (Fb ‘Wall’)
Profiles = Digital identity
(Forums = requires bbPress)
It’s time to stop thinking about ‘blogs’ and start thinking about...
Preserving the Hand-Painted Films of Margaret Tait
An MA Dissertation by Joss Winn, 2002

1.1 Margaret Tait

Born on Armistice Day in 1918 in Kirkwall, Orkney, Margaret Caroline Tait made her first film in 1951 and her last in 1998. During that time, she made thirty-two films ranging from short hand-painted animations to a feature-length narrative fiction film. All except the feature, Blue-Black Permanent (1992), were independently financed despite periodic attempts to interest sponsors in her work. The financing of her work while she was alive remains significant even today because the collection of film and sound elements donated by her husband Alex Pirie, to the SFTVA very much reflects the unusual circumstances under which she made films for almost forty years.

At the age of nine, she was sent to the Esideale boarding-school in Edinburgh and remained in the city to study medicine at Edinburgh University, graduating with a MB, CH.B in 1941. In 1943, she joined the Royal Army Medical Corps and was posted to military hospitals overseas, first in central India and then in Ceylon. Following the Japanese surrender in August 1945, she was posted to Johore Bahru, Malaya and Singapore. Then, shortly after the war, she went to Perugia.
'proper' websites
microblogs
Math for the Masses

by mldawaffe

Odd as it may sound, I miss all the equations from my days in grad school, so I decided that what WordPress.com needed most was a hot, niche feature that maybe 17 people would use regularly:

\LaTeX

For those that don’t know, \LaTeX is a typesetting system particularly well suited for documents of a mathematical persuasion. It’s used almost exclusively by many technical, scientific and mathematical disciplines both in academia and industry. It also looks really good; I, among many, consider Donald E. Knuth a personal hero.

For those that do know, it’s now ridiculously easy to include \LaTeX formulas in your blog posts.

The syntax is reminiscent of \LaTeX’s Inline math mode: $\texttt{\LaTeX your-latex-code-here}$, and it allows you to produce most any equation. For example, the following code

$latex \frac{\partial}{\partial t} \left\langle \Psi(t) \right\rangle = H \left\langle \Psi(t) \right\rangle$\
yields

$i\hbar \frac{d}{dt} |\Psi(t)\rangle = H |\Psi(t)\rangle$.

Pretty sweet, huh?

To further whet your appetite, these few standards show a bit more about what’s now possible on WordPress.com.

$$M = \frac{kT}{2} \sum_N \left( \frac{\partial Q_{N}}{\partial D} \right)_{V,T} \lambda^N$$

$$C^{(1)}_{ab} = -\frac{1}{2} \partial^\alpha \partial^\gamma c_{\alpha\gamma_{ab}} + \partial^\alpha \partial_{(\alpha} \gamma_{\beta)} - \frac{1}{2} g_{ab} \partial^\alpha \partial^\beta \gamma_{\alpha\beta} = 8\pi T_{ab}$$

$$P^{\nu}_{-\mu}(z) = \frac{(z^2 - 1)^{\frac{\mu}{2}}}{2^{\nu} \sqrt{\pi \Gamma(\nu + \frac{1}{2})}} \int_{-1}^{1} \frac{(1 - t^2)^{\mu - \frac{1}{2}}}{(z + t\sqrt{z^2 - 1})^{\nu + \frac{3}{2}}} dt$$
e-Portfolios

Creating ePortfolios Using WordPress or Movable Type
(blogging software with user-generated pages)
©2009, Helen C. Barrett, Ph.D.
Editorial Introduction – Code4Lib: Long May You Run

Tom Keays

The Code4Lib Journal mirrors the diversity and depth of interests and expertise of its readership. Our successes, indeed, are yours.

How Hard Can It Be? : Developing in Open Source

Joann Ransom with Chris Cormack and Rosalie Blake

In 2000 a small public library system in New Zealand developed and released Koha, the world’s first open source library management system. This is the story of how that came to pass and why, and of the lessons learnt in their first foray into developing in open source.

Extracting User Interaction Information from the Transaction Logs of a Faceted Navigation OPAC

Cory Lown and Brad Hemminger

This paper discusses the analysis of Apache web server logs from a faceted catalog interface (OPAC) at North Carolina State University. By grouping individual HTTP requests into user sessions and analyzing in that context, requests can be understood as particular user actions, with more specificity as to purpose and effect of an action. Client IP address and time are used as a sufficient proxy for determining user sessions from logs. Some initial exploratory findings of user behavior in the NCSU OPAC are provided, including that users make use of facets less than of text searching, and that some facet groups are used significantly more than others. Links are provided to the scripts used to make this session-based analysis, which could be modified for use with other faceted OPACs which use an Apache front-end.
an institutional archive
lifestreams

Today

* Posted a comment.  
  — 6:47am via [BackType](#)

Yesterday

- [@psychemedia](#) Technology as a Foreign Language. I think I'm going to use that for the name of workshop series If it's ok.  
  — 6:59pm via [Twitter](#)

- At a Christening. Off to the reception. We're God parents! [Josswinn](#)  
  — 3:31pm via [Twitter](#)

- Shared [Melting ice will trigger disasters.](#)  
  — 1:30am via [Google Reader](#)

- Shared 5 links.  
  — 12:18am via [Google Reader](#)

  - Ev and Biz Discuss Early Days of Blogger After 10th Anniversary  
  - Information feudalism and permanent rent in the cloud  
  - How eBay and Skype got divorced  
  - Wordpress blogs under hack attack  
  - RSS has no Fail Whale

September 5th

- Going to the shop to buy some mussels.  
  — 9:34am via [Twitter](#)

- Shared [The oil we eat: Following the food chain back to Iraq—by Richard Manning](#)  
  — 12:22am via [Delicious](#)

- @aaronrcross funny you should say that. I was thinking about it, for the demonstration. I'll give it a go over the weekend.  
  — 11:32pm via [Twitter](#)

- preparing WordPressMU/BuddyPress demo for [zalezzone](#)  
  — 11:08pm via [Twitter](#)
code review

```php
<?php
function widget_extrafeeds_register() {
    function widget_extrafeeds($args) {
        extract($args);
    }
}
<br />
<?php echo $before_widget;
<?php echo $before_title;
<?php echo $widget_name;
<?php echo $after_title; ?>
<ul class="sidebarList">
</ul>
<?php echo $after_widget; ?>
<?php
}
}
register_sidebar_widget('Extra Feeds',
    'widget_extrafeeds');
register_sidebar_widget('Extra Feeds', 'widget_extrafeeds');
add_action('init', widget_extrafeeds_register);
?>
```
advanced mapping: GPX, KML, GeoRSS
I could go on... :-}
The technical slide:

The more resources you throw at it, the better it will run. *

* and use LAMP
LDAP and AD support

To start allowing users to log in with LDAP credentials, you will need to Enable LDAP-Authorization below. LDAP Authentication is available for all accounts. It is recommended that you still maintain a local admin account to allow access if the LDAP server is unavailable.

Connection Settings

LDAP-Authorization:  
- Enabled
- Disabled
If this is disabled, then entire plugin will be disabled. Users will need to log in using WPMU user credentials, and will not be able to use LDAP credentials to access their accounts.

Server Encryption:  
- None
- SSL
- TLS
Select none to connect over ldap://, Select SSL to connect over ldaps://, Select TLS to connect using TLS encryption.

Server Address:  
The name or IP address of the LDAP server. The protocol should be left out. (Ex: ldap.example.com)

Server Port:  
389
Port Number of the LDAP server. (LDAP: Linux=389, Windows=3268) (LDAPS: Linux=686, Windows=3269)

Search DN:  
The base DN in which to carry out LDAP searches.

Search User DN:  
Some systems do not allow anonymous searching for attributes, and so this will set the account to use when connecting for searches.

Search User Password:  
Password for the User DN above.

LDAP Type:  
- Linux
- Windows

Test Connection:  
- Yes
- No
Specifies whether or not to test the ldap server connection on form submit.
Feeds galore!

http://example.com/feed/
http://example.com/feed/rss/
http://example.com/feed/rss2/
http://example.com/feed/rdf/
http://example.com/feed/atom/
http://example.com/category/my_category/feed/
http://example.com/tag/my_tag/feed/
http://example.com/tag/tag1+tag2+tag3/feed/
http://example.com/comments/feed/
http://example.com/2009/01/01/my-latest-post/feed
http://example.com/2009/01/01/my-latest-post/feed/&withoutcomments=1
http://example.com/author/joss/feed
http://example.com/2009/feed
http://example.com/2009/01/feed
http://example.com/2009/01/15/feed
Bring WordPress into Blackboard with Feed2JS
Institutional benefits?

It's easier to support hundreds of blogs on an institutional platform than hundreds of blogs on third-party services.
Enhances the university brand. Open and progressive

Good academic content is good SEO
WordPress MU is a repository of research, teaching and learning
“Can WordPress be a VLE PLE LMS CRM ECMS etc...?" No!
It's Open Source. What about support?
This presentation was originally prepared for a demonstration at the ALT Conference 2009. For more details, see: http://joss.blogs.lincoln.ac.uk/2009/08/27/alt-c-2009-demo-wordpress-multi-user-buddypress-and-beyond/

"BuddyPress' is a new social networking layer for WordPress Multi-User blogs. It provides familiar, easy to use social networking features in addition to a high-quality and popular blogging platform. The University of Lincoln have been trialing WordPress MU since May 2008 and have been using BuddyPress since February 2009 to develop an institutional social networking community built around personalised and collaborative web publishing. This session will demonstrate the versatility of the WordPress MU platform. We'll look at an installation that is enhanced with BuddyPress, LDAP authentication, mobile phone support and advanced privacy controls. You'll see how simple it is to set up site-wide RSS syndication and aggregation, enhance your blog with semantic web tools, publish mathematical formulae with LaTeX, send realtime notifications to Facebook, Twitter and IM, publish podcasts to iTunes, and embed GPX and KML mapping files. We'll also look at how to embed WordPress content in your VLE and other institutional websites. The use of a temporary 'ALT-C 2009 BuddyPress' installation will be encouraged. There will be opportunities throughout for questions and answers and participants will leave with a good understanding of the advantages and disadvantages of WordPress and the resources and skills required to provide a social networking and blogging platform in your institution."
Hello. My name is Joss. I work at the University of Lincoln, UK, in the Centre for Educational Research and Development. We’ve been using WordPress for about 18 months now. When I joined the university, I asked for my own server. If you’re going to do research and development with educational technology, having your own server is a good idea. I’m not an ‘IT guy’. I just think that if servers are the machines that run the code that runs the ‘developed world’, I’d like to know how they work. Before I started working at the university, I’d never taken any interest in WordPress or web applications in general. I liked tinkering with Operating Systems in my spare time.

I like WordPress because it’s a useful way of framing the Internet. I’ve learned a lot by approaching the web and WordPress in this way. Similarly, I learned a lot about Operating Systems by using Linux.
Technically, WordPress Multi-User is 99% the same as WordPress

If you’re already self-hosting WordPress, you shouldn’t worry about self-hosting WordPress Multi-User. Technically, the differences are insignificant. The main difference is that you can administer more than one site from the same installation. That’s a really useful thing, which you’ll appreciate if you’re running more than one website.

Why WordPress?

It’s popular. Millions of people choose to use it, support it and develop for it. It’s flexible. Think of it as a web development platform, not just ‘blogging software’. The development of WordPress tracks broader developments in web technology. Sometimes, it leads them. It’s open source. No license fees, no restrictions on use. You are part of a community.

‘BuddyPress’ is just a set of plugins for WordPress Multi-User.

No big deal.

Really. It’s no big deal.

http://wordpress.org/extend/plugins/buddypress/
I find it useful to think of BuddyPress as a **social networking layer**, that sits on top of (or in front of??) WordPress Multi-User (WPMU). You can use BuddyPress all day long and never go near a blog. In my experience, BuddyPress has made WordPress Multi-User **easier** for people to use. People can create a WordPress blog in their own time but still **participate** in the community. Over 95% of students use Facebook. BuddyPress is easier to use than Facebook (and people don’t throw **Zombies** at each other).
Understanding a few of the core WordPress concepts can help you imagine how you might structure your website.
These are what BuddyPress brings to WordPressMU

**Members** = Find people  
**Groups** = Identify with others  
**Activity** = Track site-wide activity  
**Friends** = Connect with peers  
**Messaging** = Email  
**Wire** = Message board (Fb ‘Wall’)  
**Profiles** = Digital identity  
**(Forums = requires bbPress)**
It’s time to stop thinking about ‘blogs’ and start thinking about...

Seriously. WPMU + BuddyPress is a platform for communities on the web. Each ‘blog’ can, in fact, be many different things. For example…
This is my MA Dissertation. A WordPress site has been re-conceptualised as a single document. Each blog post, is a document section. Each paragraph can be commented on, annotated, discussed and reviewed. We’ve been funded to work on developing this idea: http://jiscpress.blogs.lincoln.ac.uk

http://wordpress.org/extend/plugins/digressit
OK. I know it looks like a blog, but that’s because blogs and the use of other Content Management Systems have changed web design and publishing in general. Note how Flickr, YouTube and social bookmarking links are all integrated into the page.
microblogs

You can create your own twitter-like website for groups of people. There are also plugins that would auto-post to Twitter, too.

http://wordpress.org/extend/themes/p2
With the LaTeX plugin, authors can publish scientific formulae. It’s supported in the comments, too. So reviewers can use LaTeX in their responses.

http://wordpress.org/extend/plugins/wp-latex/
Dr. Helen Barrett has thought a lot about how WordPress can be used as an e-portfolio tool.

http://sites.google.com/site/eportfolioswp/
I also run Open Journal Systems at the University of Lincoln. I’m torn between using WordPress or OJS. OJS is a good tool, but because it supports what can be a complex workflow of blind-peer-review, it’s also quite difficult for some people to use. I think WordPress would make a decent journal publishing tool and it would be easier to use at the expense of losing some specific functionality which OJS provides.

There’s a WordPress Publishers blog that highlights how WordPress is being used for different types of web publishing. For managing the journal workflow, plugins like these might be useful: http://publisherblog.automattic.com/2009/06/02/wordpress-plugins-collaboration-emails/
Blog posts from across your WPMU platform can be aggregated into a single site for browsing, searching. Imagine how useful an institutional archive might be if the majority of staff and students used WordPressMU to write about their research, teaching and learning. Instead of your institutional scholarly output being held in Word and PDF documents, they can be published in modern, open web standards such as HTML and RSS. When they’re published in this way, your collective research, teaching and learning, can be visualised, interpreted and discovered in ways that are still being invented. Your content will move with and benefit from progress made on the web.

http://wordpress.org/extend/plugins/wordpress-mu-sitewide-tags/
You can bring any other service you use on the web into your WordPress blog as a Lifestream.

http://wordpress.org/extend/plugins/lifestream/
There are a number of syntax highlighting plugins

http://wordpress.org/extend/plugins/syntaxhighlighter/
This is cool. It’s a plugin that provides comprehensive support for GPX, KML, GeoRSS. Whether you undertake scientific field studies or are a fanatic jogger, you could use this to present your tracks using the Google Maps API.

http://wordpress.org/extend/plugins/xml-google-maps/
I could go on... :-) 

But I won’t.
It runs on Windows IIS, but if you want decent community support, run it on LAMP (Linux, Apache, MySQL, PHP)

Give it a dedicated server and lots of RAM if you’re expecting hundreds or thousands of users.

Like any web application, as it grows, you’ll need to split the database onto other servers. It will scale to whatever your needs as long as you have the resources. (wordpress.com hosts 6m blogs)

It integrates easily into an existing LDAP/AD

IIS discussions: http://mu.wordpress.org/forums/tags/iis
WPMU README.txt: http://trac.mu.wordpress.org/browser/trunk/README.txt
We use this on our university blogs. It’s very simple to implement LDAP support and allow your staff and students to log into WordPressMU with their existing credentials.

http://sourceforge.net/projects/wpmu-ldap/
That's a lot of feed end-points. By the way, with digress.it (http://wordpress.org/plugins/digressit) you get comment author feeds and paragraph level comment feeds, too. Crazy.

I've written quite comprehensively about WordPress feeds here: http://joss.blogs.lincoln.ac.uk/2009/04/15/addicted-to-feeds/
Bring WordPress into Blackboard with Feed2JS

You can use Feed2JS (http://feed2js.org/) to take a WordPress RSS feed and convert it to Javascript. Just paste the Javascript into the HTML view of the Blackboard editor. Feed2JS is highly configurable making WordPress/Blackboard (or any other VLE), a flexible arrangement.
Institutional benefits?

It's easier to support hundred of blogs on an institutional platform than hundreds of blogs on third-party services.

The way the multi-user environment works means that I effectively support one blog, rather than many. If a whole class of students needs blogs or adding to a single blog, I can have this set up in minutes.
Enhances the university brand. Open and progressive

Good academic content is good SEO

All blogs get a university domain name. The university brand is valued by many staff and students. The rapid production of generally good quality content is good SEO for the university as a whole.
WordPress MU is a repository of research, teaching and learning
"Can WordPress be a VLE PLE LMS CRM ECMS etc...?"

No!

WordPressMU is a very versatile tool, but don't expect it to do everything. Organisations really need to move away from thinking about 'one tool to rule them all'. It's tempting to work this way because it's easier for people to learn just one tool and easier for organisations to support just one tool. But if you want a VLE/CRM or ECMS, etc. I would recommend you look elsewhere.

What is important in a publishing tool like Wordpress, is that it's easy to get data in and get data out. WordPress is superb in this respect and as a consequence, can work well with other applications you choose to use.

Data formats like RSS/Atom and good Access Management (single-sign-on) are a way of loosely joining applications into a whole. That is how the web works. That is how institutional uses of the web should work, too.
It's Open Source.
What about support?

The community is huge and responsive to answering questions.

http://wordpress.org/support/
http://mu.wordpress.org/forums/
http://buddypress.org/forums/
http://www.wpmudev.org/
http://www.google.co.uk/search?q=wordpress

For paid support, I'd recommend:

http://premium.wpmudev.org/ (Cheap)

http://automattic.com/services/support-network/ (Not so cheap, but proper 'enterprise support' with an SLA. You'll get support from core WordPress developers)
@josswinn
jwinn@lincoln.ac.uk
http://jossblogs.lincoln.ac.uk
http://mu.wordpress.org/forums/profile/508233
http://buddypress.org/developers/josswinn/

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