



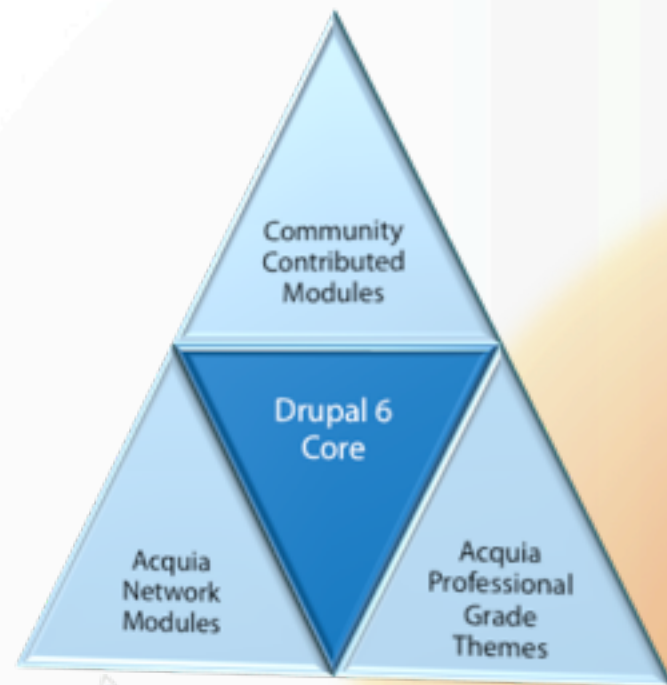
Multisite in Drupal

Joshua Brauer

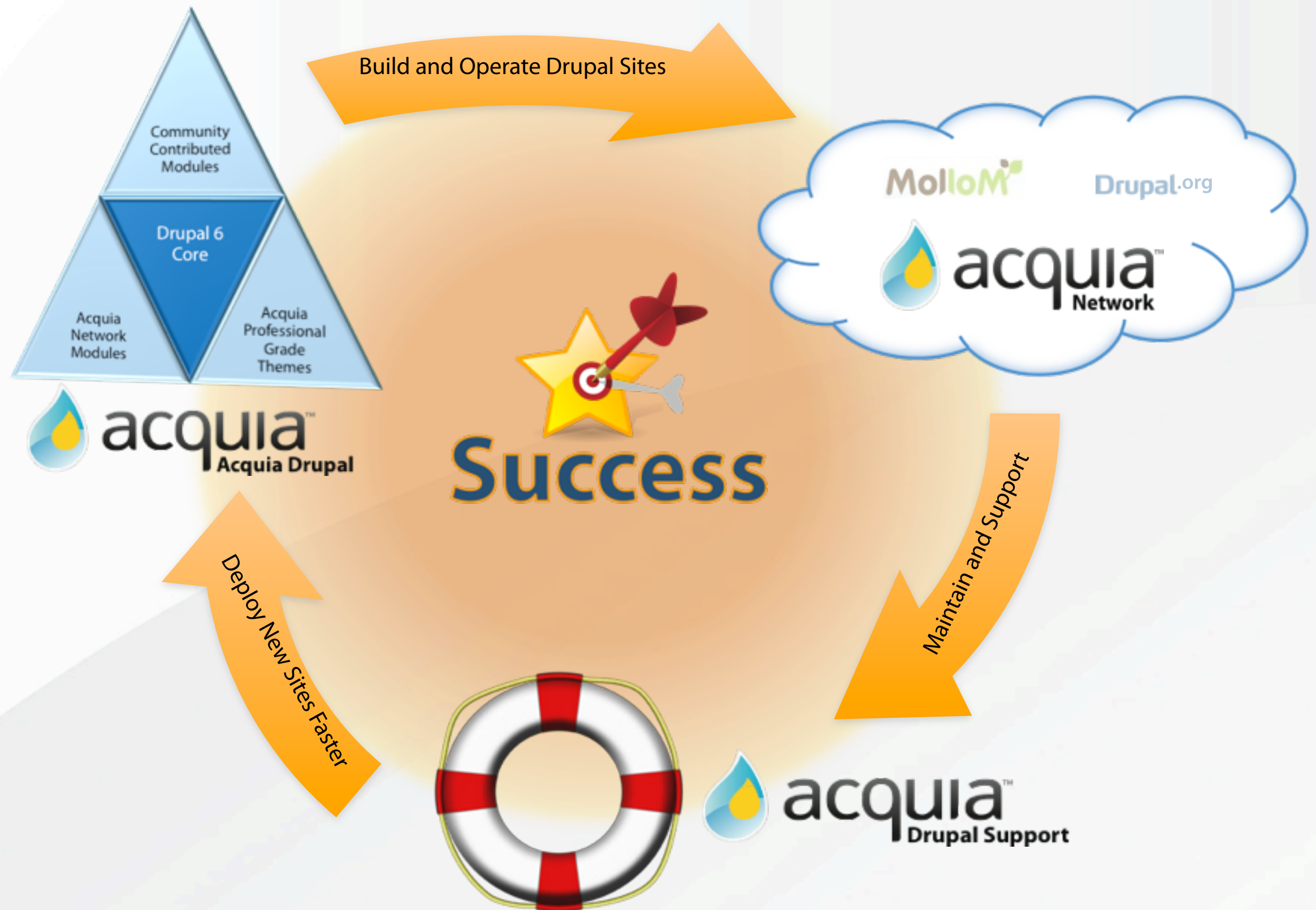
Boise Drupal User's Group, May 5th, 2009

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Text
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Why multi-site?

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💧 One code base*

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- Many different sites

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- 💧 One code base*
- 💧 Many different sites
- 💧 Shared data
- 💧 Themes possible for each site
- 💧 Modules possible for each site

Why not Multi-site?

💧 Cheap hosting ... no free lunch...

Personal	Standard	Advanced
\$2.25	\$4.49	\$6.99
Unix 	Unix 	Unix 
• Free Setup • 100MB 200 GB Web Space. • 5-GB 300 GB Web Traffic. • 40 Email Accounts • CGI-BIN / PHP ver. 5.2.5. • PHP Modules. • 1 MYSQL ver. 5.0. • FrontPage Extensions • Web Site Builder	• Free Setup • Backup Tools • 350MB 300 GB Web Space. • 15-GB 1000 GB Web Traffic. • 100 Email Accounts. • CGI-BIN / PHP ver. 5.2.5. • 3 MYSQL ver. 5.0. • FrontPage Extensions • Web Site Builder	• Free Setup • Backup Tools • 800-MB 600 GB Web Space. • 30-GB 2000 GB Web Traffic. • 400 Email Accounts. • CGI-BIN / PHP ver. 5.2.5. • 10 MYSQL ver. 5.0. • FrontPage Extensions • Web Site Builder
Buy Now ✓ More >>	Buy Now ✓ More >>	Buy Now ✓ More >>

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Like sushi cheaper isn't always good enough

What is multi-site?

- <http://www.example.com>
- <http://intranet.example.com>
- <http://conference.example.com>
- <http://conference.example.com/2008>
- <http://conference.example.com/2009>
- <http://newspaper.com/>
- <http://student.myclass.school.edu/>

What is multi-site?

- <http://www.example.com>
- <http://intranet.example.com>
- <http://conference.example.com>
- <http://conference.example.com/2008>
- <http://co>
- <http://newspaper.com/>
- <http://student.myclass.school.edu/>

All from one set of Drupal code

Requests



Requests



Requests



<http://www.example.com>

Requests



<http://www.example.com>

Requests



<http://www.example.com>



Apache Webserver

```
<VirtualHost *>
    ServerName "example.com"
    DocumentRoot "/var/www/drupal"
</VirtualHost>

<VirtualHost *>
    ServerName "conference.example.com"
    DocumentRoot "/var/www/drupal"
    ServerAlias newspaper.com intranet.example.com
</VirtualHost>

<VirtualHost *>
    ServerName "drupal7.example.com"
    DocumentRoot "/var/www/drupal7"
</VirtualHost>
```

Where the wild things are...

Where the wild things are...

[illegible]

Where the wild things are...

[illegible]

Where the wild things are...

💧 <u>www.example.com</u>	/var/www/index.php
💧 <u>intranet.example.com</u>	

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💧 student.myclass.school.edu/	

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💧 student.myclass.school.edu/	/var/www/index.php

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💧 student.myclass.school.edu/	/var/www/index.php
💧 <u>conference.example.com</u> /2008	

Where the wild things are...

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💧 <u>newspaper.com</u>	/var/www/index.php
💧 student.myclass.school.edu/	/var/www/index.php
💧 <u>conference.example.com</u> /2008	/var/www/ 2008 /index.php

Where the wild things are...

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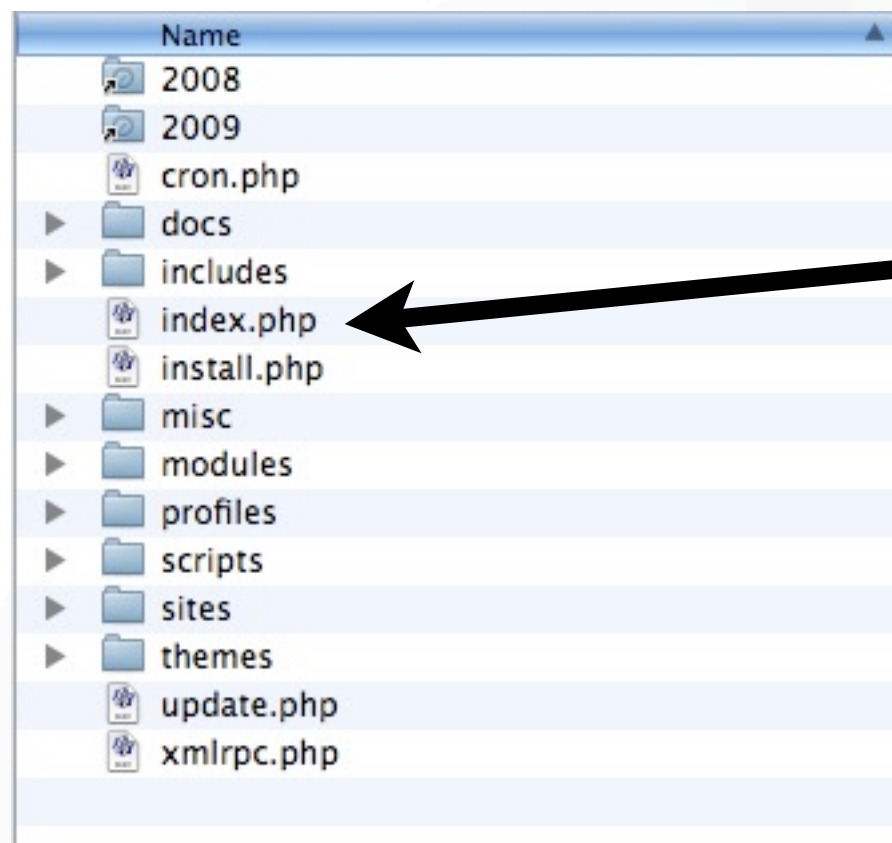
In a multi-site configuration all FQDN's point to the **same** directory in the filesystem

But wait... I don't have access
to my Apache httpd.conf...

Can it still work?

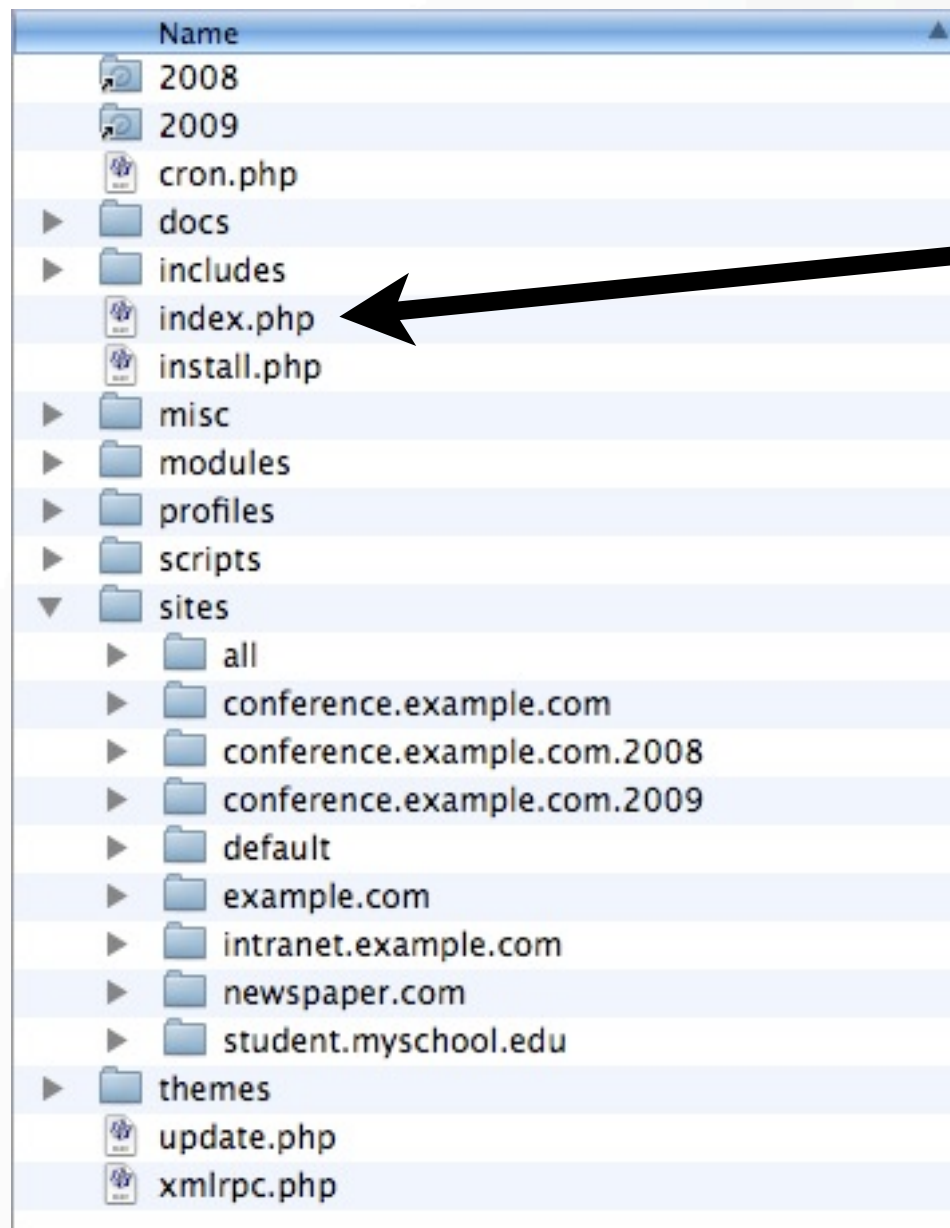
Look for “parking” options on host

Files in the directory



www.example.com

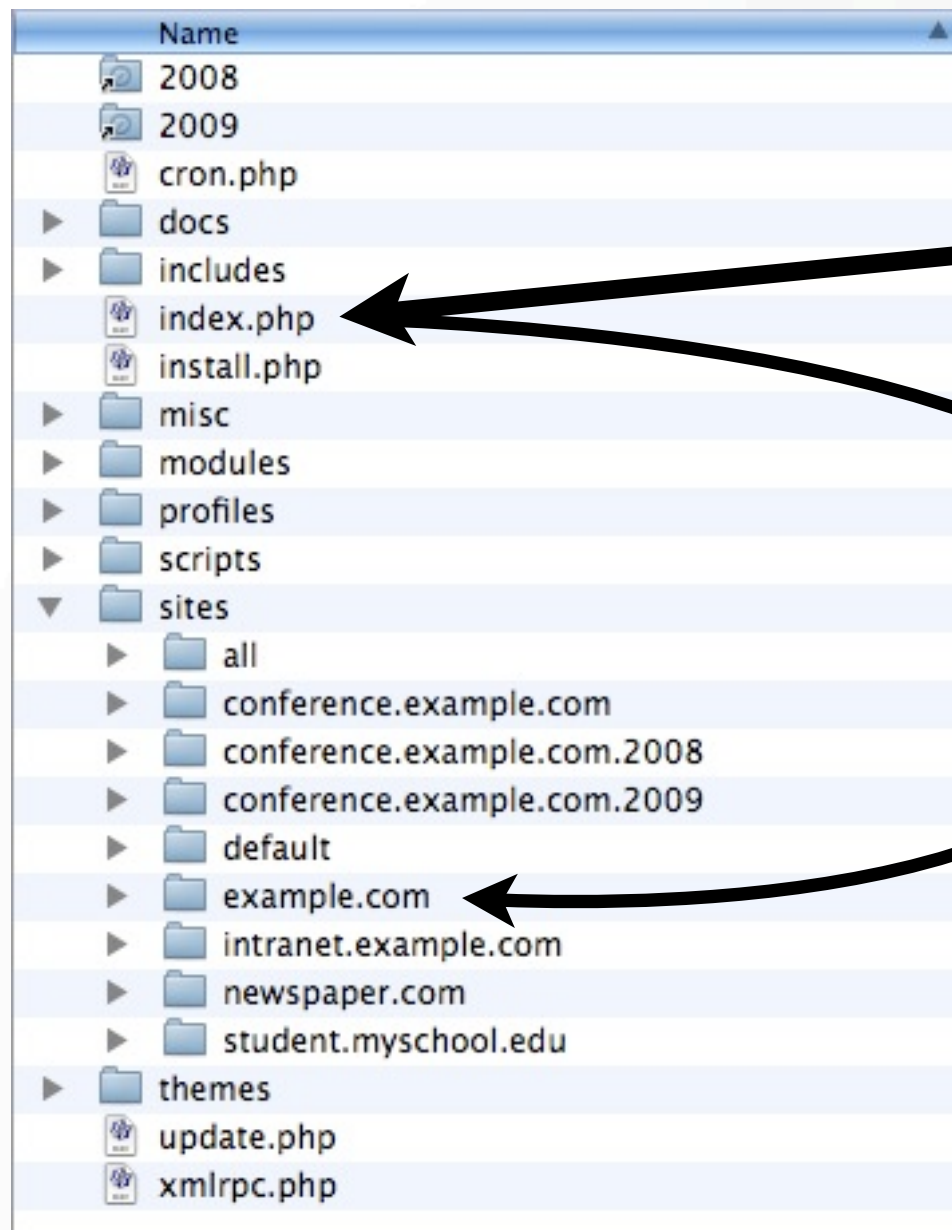
The Drupal juice



www.example.com



The Drupal juice



www.example.com



Searching for settings.php

* For example, for a fictitious site installed at <http://www.drupal.org/mysite/test/>, the 'settings.php' is searched in the following directories:

*

* 1. sites/[www.drupal.org.mysite.test](http://www.drupal.org/mysite/test/)

* 2. sites/drupal.org.mysite.test

* 3. sites/org.mysite.test

*

* 4. sites/[www.drupal.org.mysite](http://www.drupal.org/mysite/)

* 5. sites/drupal.org.mysite

* 6. sites/org.mysite

*

* 7. sites/www.drupal.org

* 8. sites/drupal.org

* 9. sites/org

*

* 10. sites/default

The case for symlinks

💧 There are two cases where symlinks may be needed

- Serving a sub-directory of a Drupal site as a site e.g.
<http://conferences.example.com/2008>
- In shared hosting where you have no choice but to have separate directories
 - 💧 example.com (contains Drupal)
 - 💧 conference.example.com (symlink to Drupal)

Databases

💧 settings.php tells Drupal which database to use

Databases

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`sites/example.com/settings.php`

Databases

💧 settings.php tells Drupal which database to use

sites/example.com/settings.php

```
$db_url = 'mysqli://user:secret@localhost/example';
```


Databases

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$db_url = 'mysqli://user:secret@localhost/example';
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Databases

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sites/example.com/settings.php

```
$db_url = 'mysqli://user:secret@localhost/example';
```

sites/conference.example.com/settings.php

💧 settings.php tells Drupal which database to use

sites/example.com/settings.php

```
$db_url = 'mysqli://user:secret@localhost/example';
```

sites/conference.example.com/settings.php

```
$db_url = 'mysqli://conf:secret@localhost/conf';
```

💧 settings.php tells Drupal which database to use

sites/example.com/settings.php

```
$db_url = 'mysqli://user:secret@localhost/example';
```

sites/conference.example.com/settings.php

```
$db_url = 'mysqli://conf:secret@localhost/conf';
```

Updates

- Updates to code apply across all sites at once
- Still need to run update.php on each site
 - <http://example.com/update.php>
 - <http://conference.example.com/update.php>

Sharing Data across sites

To settings.php once more...

```
* $db_prefix = array(  
*   'default' => 'main_',  
*   'users'   => 'shared_',  
*   'sessions' => 'shared_',  
*   'role'    => 'shared_',  
*   'authmap' => 'shared_',  
* );
```


To settings.php once more...

```
* $db_prefix = array(  
*   'default' => 'main_',  
*   'users'   => 'shared_',  
*   'sessions' => 'shared_',  
*   'role'    => 'shared_',  
*   'authmap' => 'shared_',  
* );
```

```
* $db_prefix = array(  
*   'default' => 'sitedb.',  
*   'users'   => 'otherdb.',  
*   'sessions' => 'otherdb.',  
*   'role'    => 'otherdb.',  
*   'authmap' => 'otherdb.',  
* );
```


Share users and sessions

```
$db_prefix = array(  
    'default' => 'main_',  
    'users'   => 'shared_',  
    'sessions' => 'shared_',  
    'authmap' => 'shared_',  
);
```

Share users, sessions and roles

```
$db_prefix = array(  
    'default' => 'main_',  
    'users'   => 'shared_',  
    'sessions' => 'shared_',  
    'role'    => 'shared_',  
    'authmap' => 'shared_',  
);
```

Users, sessions, roles and role assignments

```
$db_prefix = array(  
    'default' => 'main_',  
    'users'   => 'shared_',  
    'sessions' => 'shared_',  
    'role'    => 'shared_',  
    'user_roles' => 'shared_',  
    'authmap' => 'shared_',  
);
```

Cookie monsters

- 💧 When sharing sessions it is important to have the correct cookie domain
- 💧 By default it will be the FQDN (e.g. <http://conference.example.com/>)
- 💧 To share sessions must set cookie domain in settings.php:
 - `$cookie_domain = 'example.com';`

More fun with databases

Advanced Database Sharing (MySQL)

- Using MySQL Views
- Symbolic links between databases at filesystem level
- Federated tables (best with LAN dbs)

More than one database

```
$db_url = array(  
  'default'      => 'mysql://db:pass@localhost/production',  
  'oldsystem'    => 'mysql://user:secret@otherhost.com/legacy'
```

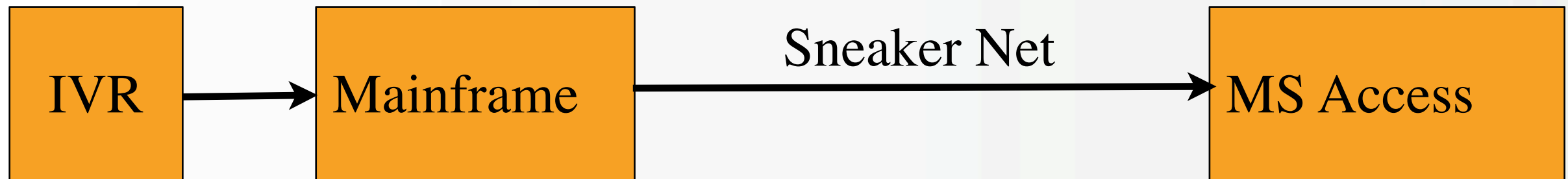
```
db_set_active()
```


Drupal 5 warning

The sequences table makes sharing tricky...

Questions?
Comments?

Wild and wooly



Wild and wooly (after)

