

# Simplifying Drupal Development with Subversion

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Andrew Berry: [andrew@abdevelopment.ca](mailto:andrew@abdevelopment.ca)  
<http://www.abdevelopment.ca/>

How do Drupal sites  
get managed and  
deployed?











And modules...

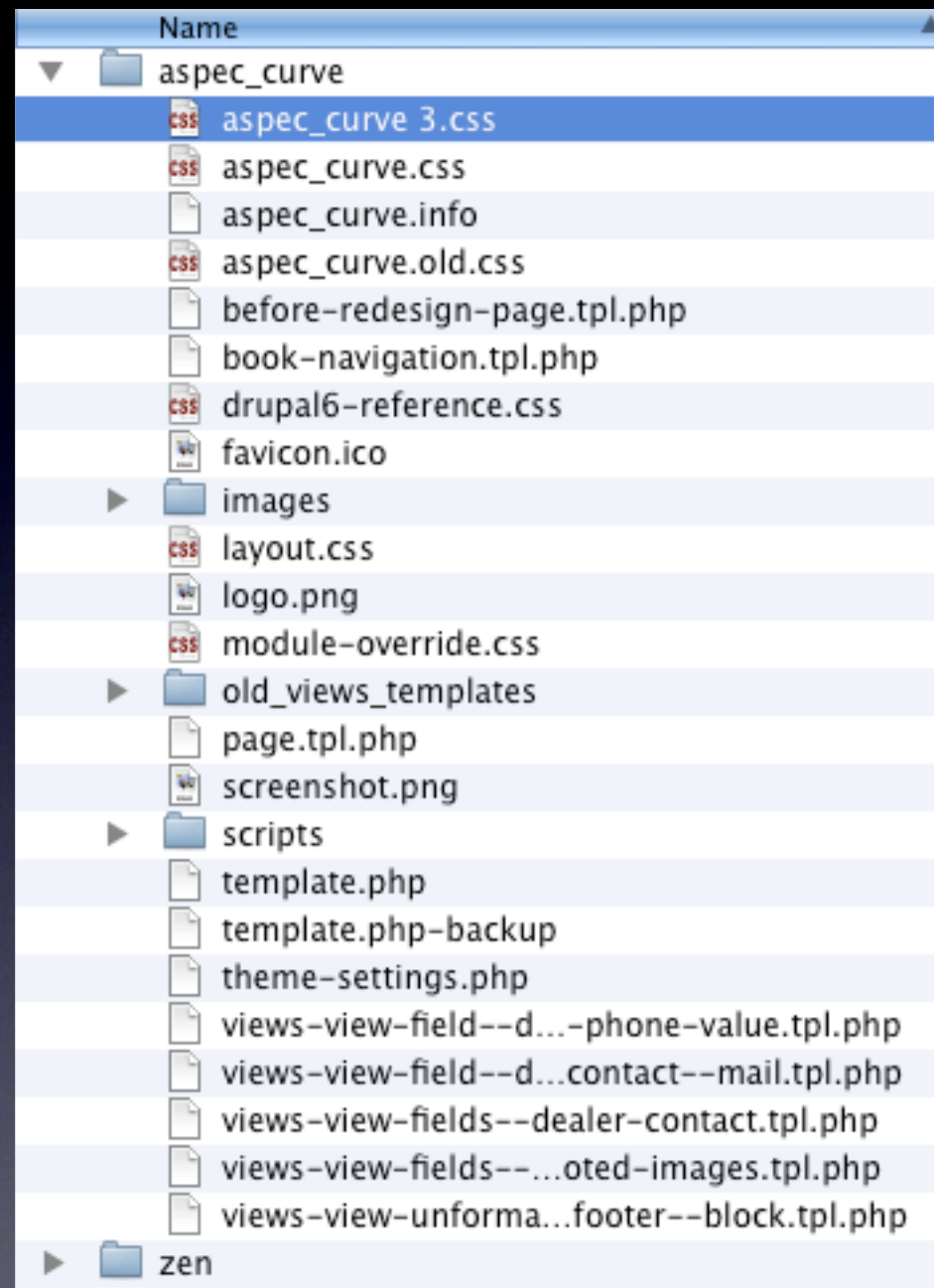


And themes...

And libraries...



And custom themes or  
code...





# What is Version Control?

- The management of changes to code and project resources over time
- Project history
- Takes the processes you do manually for creating copies of old files, cleans it up, and makes it automatic



















# Immediate benefits

- Revert local changes
- Revert to a previous version
- Compare previous versions of a file
- “annotate” or “blame”
- Multiple developers / computers
- Conflict resolution



# SVN Hosting

- Your own system (VPS, desktop, web server, etc)
  - Just make sure that your server is accessible over the 'net
- Code hosting services
  - Unfuddle, Beanstalk, Springloops, etc
  - Google Code, Sourceforge

# Setting Up the command-line SVN Client

- It's really simple on Linux - just search for and install “subversion” from your package manager
- OS X 10.5 includes an older version of Subversion (1.4.4 currently)
  - I recommend downloading the latest version and installing that, or upgrading to 1.6
- For Windows, or the latest version for other OS's, see <http://subversion.tigris.org/>





<http://www.flickr.com/photos/dansl80/243974098/>

# Demonstration!

(and a note about the CLI vs GUI)



About .svn folders...



# I broke it!

- `svn stat`
- `svn diff`
- `svn revert`
- `svn merge -r HEAD:PREV .`
- If it's committed, your local checkout is expendable

# Repository Layout







# Three Directories

- trunk
- branches
- tags
- ...



# Branches Merging to Trunk

- Have each developer working on a feature work in their own branch
- When complete, merge back to trunk
- Deploy site from trunk, or from a tag made from trunk

# Trunk Splitting into Branches

- Trunk is the latest, bleeding-edge code
- Branch from trunk to stabilize code for release
- Tag from branch once ready to be deployed



Whatever your  
repository layout, keep  
it consistent and  
documented



<http://www.flickr.com/photos/40002687@N02/3676625419/>

# Demo!



# svn switch

(having the entire repository checked out isn't the best use of your disk space)

# Deployment Advantages

- No more FTP!
- No more manual tracking of file and folder changes
- Much faster transfer (compression, differences only, less overhead)
- Use 'svn stat' on the server to detect changes



# Drupal-specific Notes

- settings.php may be an issue due to SQL passwords
- /files directories
  - svn:ignore
- Database / code coupling

# hook\_update\_N

- You can use a custom module with a .install file to automatically configure site updates
- For example, you can easily set variables, install modules, or update the database
- Word at the 'camp says you can even deploy Features with SVN (woah!)





# External Code

- Every Drupal developer will need to merge in changes from external sources
- Subversion, plus additional utilities, can make updating modules a much simpler process
- Faster, less errors, automatic patch integration (!)
- Many thanks to IMAGEX MEDIA (<http://imagexmedia.com/>)





# In a Nutshell

- Import the first version of the module into /vendor/modules/<module\_name>/current
  - I use current-47, current-5, current-6
- Tag current with version number
  - “svn cp current 6.x-1.0”
- Use svn\_load\_dirs.pl to import later versions of the module
  - `svn_load_dirs.pl -t 6.x-1.1 https://example.com/svn/vendor/modules/cck current cck`



Or, just use d.o-cvs-  
import.php

\$ d.o-cvs-import.php views DRUPAL-6--2-6  
(thanks dww!)

# Handy Utilities

- `svnmerge.py`: <http://www.orcaware.com/svn/wiki/Svnmerge.py>
- `svn_load_dirs.pl` (or the Python equivalent)
- `grep`
- `diff` / `patch`
- `pbcopy`, `pbpaste`, `open`, `gnome-open`



# GUI Clients

- IDE Plugins (Eclipse, NetBeans, DreamWeaver, etc)
- TortoiseSVN (watch the download links for ads)
- KSVN
- Web interface (WebSVN, ViewVC, mod\_svn)
- Many, many others

# Other VCS'

- Drupal uses CVS
- The Linux Kernel developers use Git
- Ubuntu uses Bazaar
- Many more Free and proprietary VCS systems
- [http://en.wikipedia.org/wiki/Revision\\_control](http://en.wikipedia.org/wiki/Revision_control)



# Questions / Comments?

Slides and scripts will be up at  
<http://www.abdevelopment.ca/>