

Web Server Performance Tuning with YSlow

Peter J. Farrell
CIO - GreatBizTools, LLC

User Experience

- Performance of Web / Application Server
 - ▶ Speed
 - ▶ Not usually focused on unless there is a need
- UI
 - ▶ Ease of use
- Content
 - ▶ Not my job...

FireBug & YSlow

■ FireBug

- ▶ Plugin for FireFox and a must have for all developers
- ▶ Free
- ▶ <http://getfirebug.com>

■ Yslow

- ▶ Developed by Yahoo as a FireBug add-on
- ▶ Free
- ▶ <http://developer.yahoo.com/yslow/>

YSlow's 13 Rules

- Make fewer HTTP requests
 - ▶ Reduce total number of external elements
- Use a CDN
 - ▶ Content Data Network (Akamai)
- Add an Expires header
- Gzip components
- Put CSS at the top
 - ▶ In HTML head
- Move (js) scripts to the bottom
 - ▶ I.e. allow for progressive rendering

YSlow's 13 Rules

- Avoid CSS expressions
- Make JS and CSS external
- Reduce DNS lookups
 - Only necessary if you have multiple domains
- Minify JS
 - Online at <http://fmarcia.info/jsmin/test.html>
- Avoid redirects
- Remove duplicate scripts
- Configure Etags
 - Best turned off for multi-server environments

Example Config Options for Apache

```
LoadModule deflate_module modules/mod_deflate.so
LoadModule expires_module modules/mod_expires.so

AddOutputFilterByType DEFLATE text/html
AddOutputFilterByType DEFLATE text/plain
AddOutputFilterByType DEFLATE text/xml
AddOutputFilterByType DEFLATE text/css
AddOutputFilterByType DEFLATE text/javascript
AddOutputFilterByType DEFLATE application/x-javascript

FileETag none
<IfModule mod_expires.c>
ExpiresActive on
ExpiresDefault A600
ExpiresByType text/css "access plus 7 days"
ExpiresByType image/gif "access plus 7 days"
ExpiresByType image/jpeg "access plus 7 days"
ExpiresByType image/png "access plus 7 days"
ExpiresByType text/javascript "access plus 7 days"
ExpiresByType application/x-javascript "access plus 7 days"
</IfModule>
```