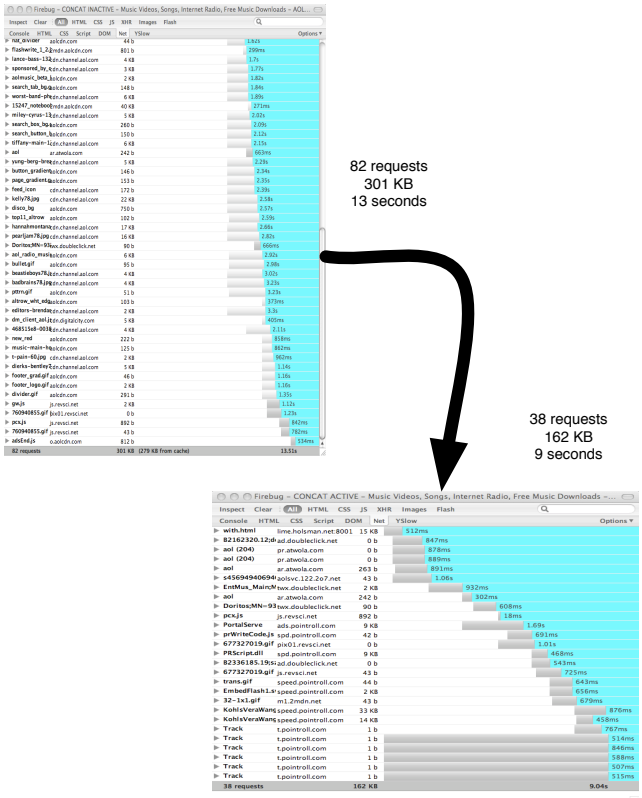
M O D C O N C A T

shrinking your response time

HOW TO



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mod concat

what is it about?

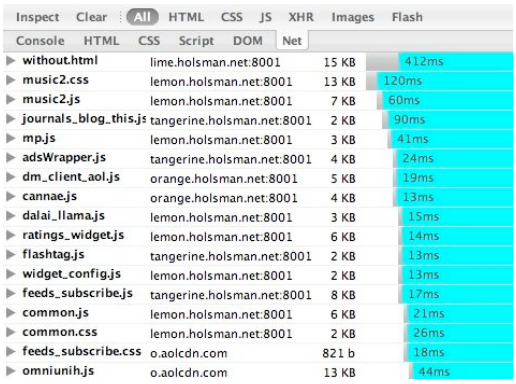
One of the reasons why pages render slowly is that they are busy loading other files which contain the layout information and code to run. Due to the way browsers are designed, and how TCP works, loading lots of little small files is not as efficient as loading a single larger file.

In a perfect world, the development/publishing staff would have a single CSS and a single javascript file for each page template, and they would be optimized for that template/page. but large organizations usually have multiple teams who work in concert to get a template out the door, each with different timelines, people, and scope issues. So what many organizations have when they design a template is have 3-4 different CSS files, nearly identical across all sites, which get put in every template, and the browser then proceeds to load these.

mod_concat is an attempt to allow template designers have a method of optimizing this, by specifying a set of files to load in one HTTP call, mod concat makes a lot of small files appear as 1 large one, making it load faster (sometimes up to 20-30% faster).

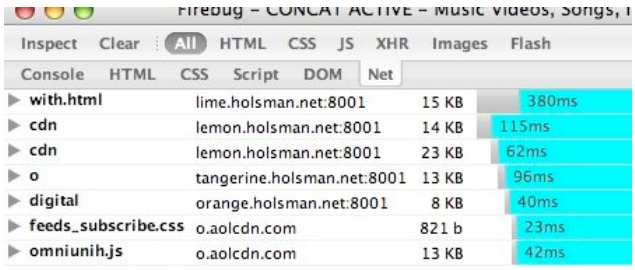
for example compare:

http://lime.holsman.net:8001/concat/without.html



to

http://lime.holsman.net:8001/concat/with.html



and you'll see the difference for yourself.

credit for this idea should go to David Davis who did it while working at Vox, and perlbal where I first saw it designed.

how do I install it?

I'm going to make you work for it :-). The code is designed for Apache 2.2.x. It should work in other versions, and your welcome to submit patches to make it work in other versions that I don't regularly use.

You will need to first download the code from the SVN repository. The repository is here:
http://modconcat.googlecode.com/svn/trunk/mod_concat/
once you have the code, just compile it via

$ apxs -c mod_concat.c

configuring concat

once you have built it, you will need to configure it.

```
Loadmodule concat_module modules/mod_concat.so
```

there is a option to disable concat running called 'concat_disable'

now a word of warning. if you use security/access permissions on your site, you will need to be very careful, as a clever person might be able to subvert this module to read the contents of this file.

how do I use it?

in your HREF tag, you do the following

..../<directory>/??file1,file2,<subdir>file3
which when called would concatenate the files /directory/file1, /directory/file2, /directory/subdir/file3 together and then send them to the browser.

to keep cache friendly, it uses the last-modified time of the most recently modified file when it sends the file.