



Zoompf's Web Performance Blog



Note: Archived Content

This is the archived version of the Zoompf blog. Since our acquisition by Rigor (</blog/2015/10/zoompf-gets-acquired>), all our new research and posts on web performance are being published on The Rigor Blog (<http://rigor.com/blog>)

What Orange Juice Can Teach You About Web Performance

 Zoompf Performance (</contact>) on June 22, 2015. Category: Uncategorized (</blog/category/uncategorized>)

When you set out to improve the performance of any process, one of the first things you consider is the concept of efficiency. According to Webster's, efficiency (<http://www.merriam-webster.com/dictionary/efficiency>) is defined as *"the ability to do something or produce something without wasting materials, time, or energy."* In the web perf world, there's not a whole lot of 'materials' flying around, so we'll focus on the time and energy components of efficiency.

Transporting data (1s and 0s) from one hop to the next, even at the speed of light (</blog/2015/04/web-performance-at-the-speed-of-light>), takes some amount of time. And it takes energy in the form of web servers and routers to actually serve up that data. You may not think about it very much, but you have an army of moving parts serving up your web content and apps.

That army, like any military force, needs to be efficient. Ask any military leader, and they'll tell you that, more often than not, it's the logistics and efficiency (or lack thereof) that is the cause of defeat in any military engagement. An army needs to be efficient, and that efficiency comes from a thousand little things...like orange juice!

That's right, the original patent for dehydrated orange (<http://www.google.com/patents/US4104414>) juice was assigned to the United States Army. Like I said, it's the little things, but let's ask a simple question: which is more efficient, shipping large jugs of orange juice into battle or carrying tiny packets of orange powder and mixing them with water on site when you need replenishment? That's right, powder wins.



(<https://pixabay.com/en/orange-garden-patala-natural-694839/>)

Image courtesy of Pixabay

And just like it's more efficient to remove the water from OJ, making the physical volume and weight of the substance substantially smaller, it is more efficient for websites to utilize HTTP compression (</blog/2012/02/lose-the-wait-http-compression>) in serving up pages, content, and apps. In fact, the exact same principles apply: when you are moving something from point A to point B, in this case web content and data, it only makes sense to make that 'something' as small as possible.

And that's how HTTP compression works. The server compresses the data, including a message to the receiving client (laptop or mobile browser) about what kind of compression is being used, and the receiving client device decompresses the data. The transfer of the data across the lines (physical lines or radio frequency lines) is made much more efficient, giving the person or people consuming the data a much better **user experience (UX)**.

Unfortunately, it turns out that a lot of websites – 64% as of a few years ago (</blog/2012/05/http-compression-use-by-alexa-top-1000>) – prefer to lug jugs of OJ into battle rather than carrying a tiny packet of powder. That's right, 64% of all websites contain at least one item that should be HTTP compressed but is not.

So the next time you are thinking about web performance, I want you to remember dehydrated orange juice!

If you are interested in reducing the size of your website's content to speed up website performance, then you will love Zoompf. We have a number of free tools that help you detect and correct frontend performance issues on your website: check out our free report (</free>) to analyze your website for common performance problems, and if you like the results consider signing up for our free alerts (</alerts>) to get notified when changes to your site slow down your performance.
