Website uptime and performance crash course

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Agenda

- Why should I work with performance

- Why should I monitor my website

- How to improve performance

- How to monitor my website

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Things we all recognise but want to avoid
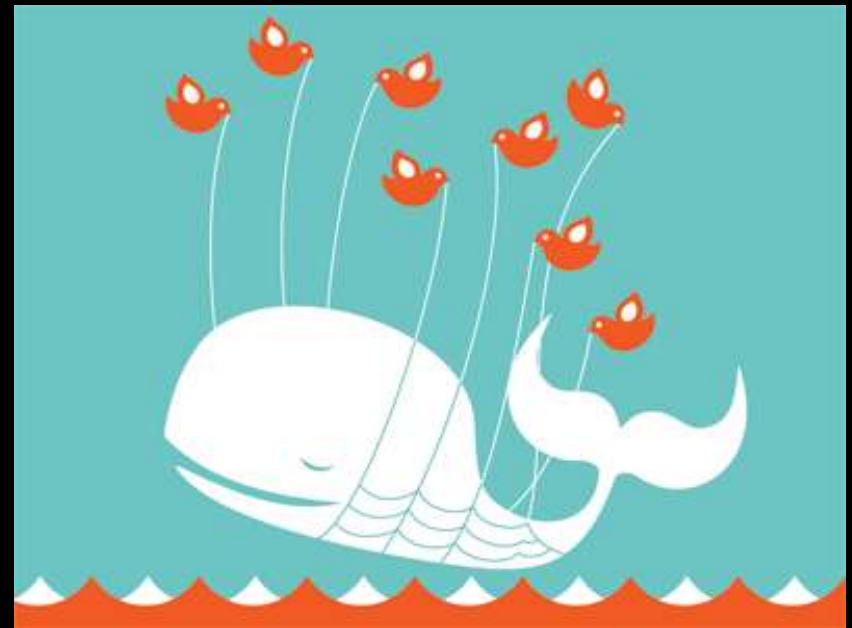## Errors are everywhere

WORDPRESS

Error establishing a database connection

This either means that the username and password information in your `wp-config.php` file is incorrect or we can't contact the database server at `localhost`. This could mean your host's database server is down.

- Are you sure you have the correct username and password?
- Are you sure that you have typed the correct hostname?
- Are you sure that the database server is running?

If you're unsure what these terms mean you should probably contact your host. If you still need help you can always visit the WordPress Support Forums.

Google Error

Server Error

The server encountered a temporary error and could not complete your request.

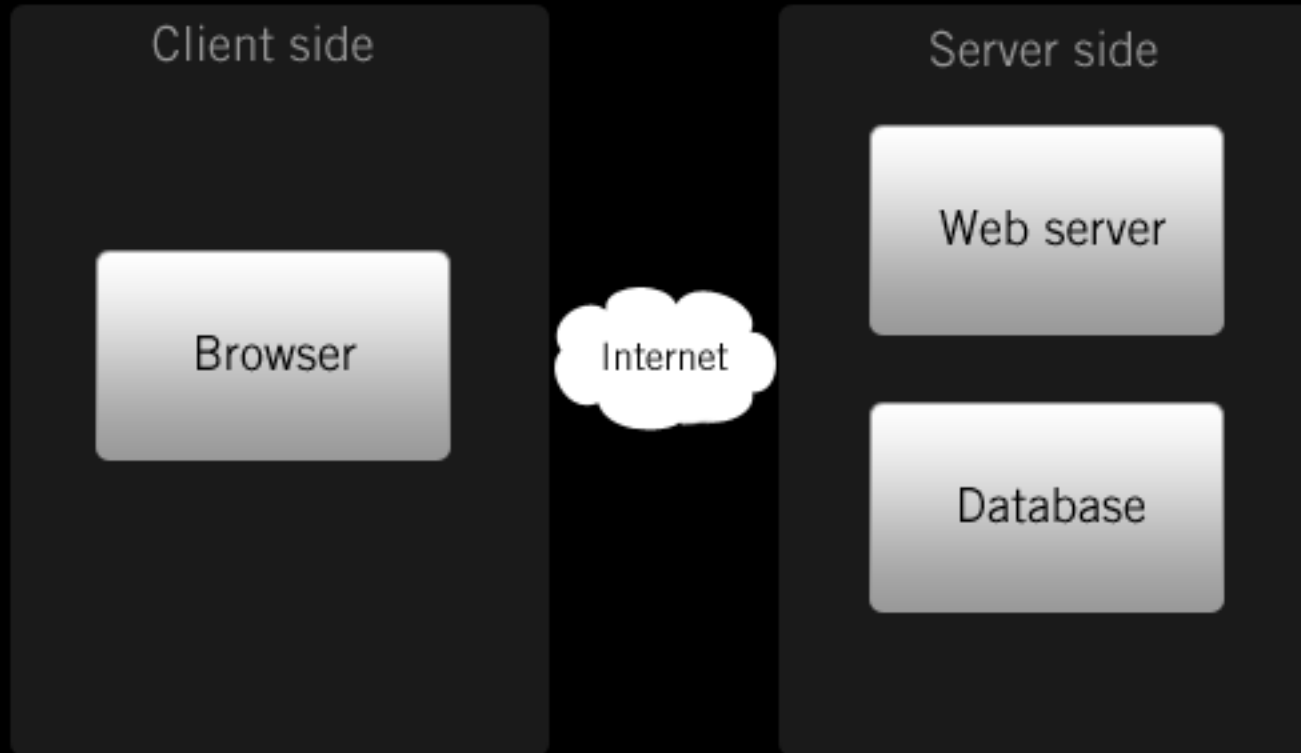Please try again in 30 seconds.

LOADING

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Benefits of monitoring & speed optimization

- Increase traffic and sales/leads

- Decrease bounce rate

- Benchmark your speed

- Gather statistics

- Keep track of your hosting and external providers

- Avoid negative press and buzz

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Some statistics

- Website downtime costs European companies over €5 billion a year
- 500 ms slower website means a 20% drop in traffic for Google
- 100 ms slower website means a 1% drop in sales for Amazon
- 47% of web users expect a site to load within 2 seconds, twice as fast as in 2006 (Akamai)
- Front end stands for 80-90% of the load time (Yahoo!)

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Make sure your system works and performs

front end (client) and back end (server)

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Client-side optimization
Measuring performance with Yslow

- Yslow measures and grades your website performance

- Firefox extension

- Download at: developer.yahoo.com

Client-side optimization
Some simple performance tips

- Smaller is better, less to transfer
- Use fewer requests, reduces overhead

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Client-side optimization
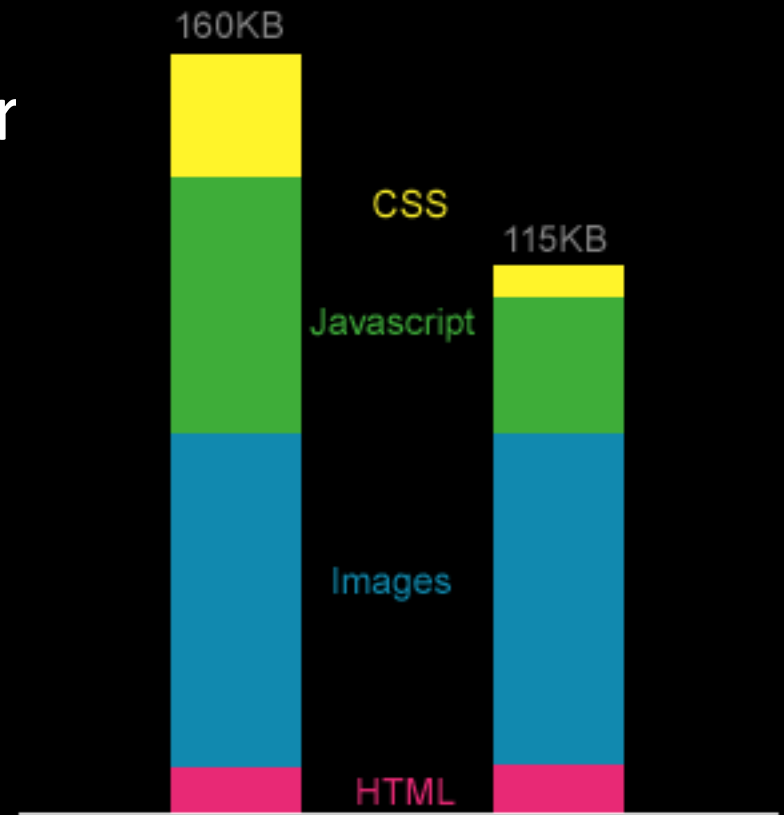## Some simple performance tips – Smaller is better!

- Compress images

- Easy with smush.it in Yslow

- Aftonbladet.se
    - 167 images, 1274.3 KB
    - 7.51% smaller, 93.63 KB saved

Smushed 7.51% or 93.63 KB from the size of your image(s). How did we do it? See the table below for more details.

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Client-side optimization
Some simple performance tips – Smaller is better!

- Compress files with Gzip

- Enable on your web server

- Can improve performance
  of about 15-25%

160KB

CSS

115KB

Javascript

Images

HTML

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Client-side optimization
Some simple performance tips – Smaller is better!

- Minify CSS and Javascript files

- Removes unnecessary white space and comments

- Free tools available

CSS Optimization completed at 0.14794 seconds

File size before optimization: 97.27 KB
File size after optimization   : 82.1 KB
Saving: 15.6%

You may save the optimized CSS file from this link
Or you may copy the text below:

```
.AB_tvpuff,.AB_tvpuff .tvtoplink
.tvtoplinkc,.AB_tvpuff
.tvdivider,.AB_PLUS_input,ul.AB_PLUS_LinkList,.
AB_PLUS_puffHeaderContainer,.AB_PLUS_puffContai
ner,.AB_PLUS_puffContainerLeft,.AB_PLUS_puffCon
tainerMiddle,.AB_PLUS_puffContainerRight,#abPlu
sTopToolbarContainer,#abPlusTopToolbarWaiting,.
abPlusStreamerNoLogo
.abPlusArticleStreamerLabel,.abPlusArticleBecom
eMemberHeaderInput,.abPlusToolsContent
ul,.abPlusToolsContent
```

NOTICE: The CSS file may not be optimized properly even it is a valid CSS. Then optimized file may not be used instead of the original file. Please back up your original file before using the optimized one and please report bugs if any.

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Client-side optimization
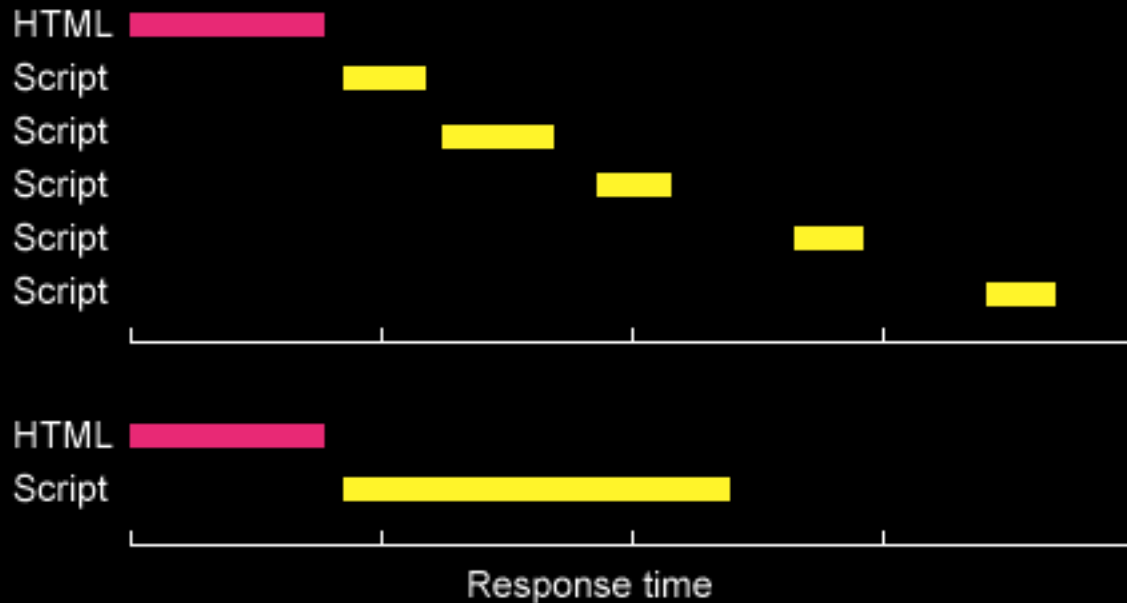## Some simple performance tips – Use fewer requests

- Use CSS sprites

- Manual work

- Several images
  can be combined
  into one image

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Client-side optimization
Some simple performance tips – Use less requests

- Combine CSS and Javascript files

- Saves requests

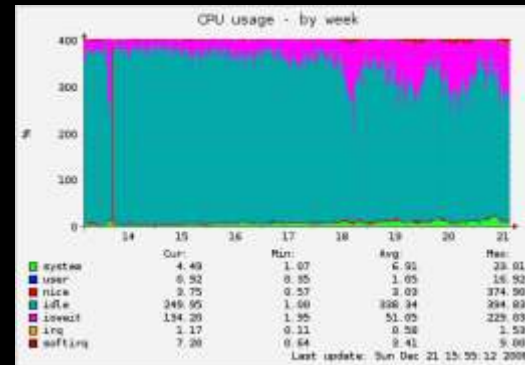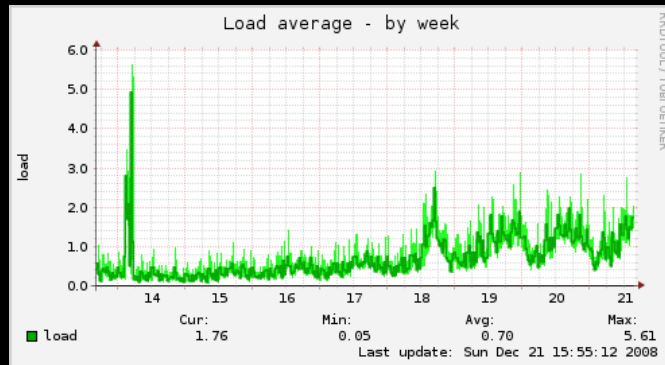- Can be done automatically using free tools

Response time

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Back-end monitoring

- Test your servers, software and networks

- Internal monitoring
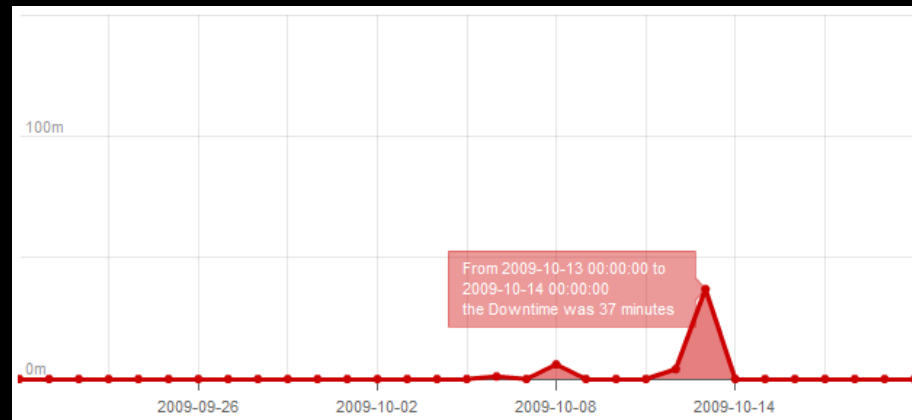
- External monitoring

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- Database servers

- CPU usage

- Disk I/O

- Critical values for your website

- Software: Nagios, Zenoss, Hyperic

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External monitoring
Check uptime and response time

- Uptime from the outside, as for real users

- Monitors from several geographical locations

- Configure alerts for downtime

- See load time from different locations

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What to do next?

- Download and install Yslow to see how you can improve website speed

- Want more performance tips? Get the books by Steve Souders

- Monitor your site for downtime. Get a free Pingdom account

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Thanks for listening!

Questions? david@pingdom.com