

VARNISH

Makes Websites Fly



Dynamic e-commerce site acceleration

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WHO ARE WE?



Maisons du Monde take you on a voyage of discovery to offer you a selection of objects and furniture around the world.

16 years old company, started from 1 shop in Bordeaux, now 200+ stores across Europe

3000+ employees



- © E-commerce website started 6 years ago
 - Completely outsourced
- E-commerce division started 1 year ago
 - 20 Internet professionals covering the whole scope of an e-commerce website
- Our objectives:
 - Double financial results every year for the next 3 years.
 - Taking Maisonsdumonde.com into one of the most profitable EU furniture website

How do we get there?



- No silver bullet:
 - Have good products

• Have a good brand

• Have great customer service

Have a reliable website

Then drive traffic to your website



- Driving traffic to a slow website DOES NOT WORK
 - Google hates you when you're slow

• If Google hates you, it indexes you less

• If you're less indexed, adwords are more expensive, and you appear less in natural searches

 And most of all, potential customers don't buy if you're slow, specially in our area

WHAT WE'VE DONE



- Thought about performance everywhere
 - When we design our product
 - When we code
 - And of course on our infrastructure

Defined performance KPIs

Implemented a monitoring tool

WHAT IS IMPORTANT FOR US?



We quite don't care about raw performance of our PHPs

We care about website performance from a customer perspective

TECHNOLOGY STACK



A custom symfony (php) based e-commerce stack.

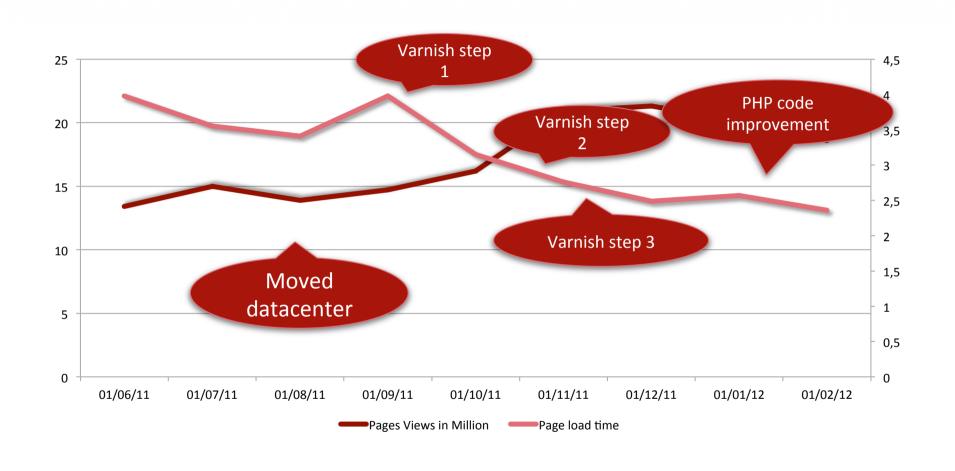
© Completly virtualized using ganetti + xen

Not in the cloud (yet ?)

Very regular releases (weekly)

HOW WE TOOK PAGE LOAD TIME DOWN





WHY VARNISH



We needed a simple and quick solution to offload our apache servers due to increase in traffic

We could not implement NGINX/Lighttpd

We wanted something simple not to jeopardize our environment



Put varnish in front of our HAProxy load-balancers



Static assets are now served via varnish:

- Offloaded our Apache servers w/o code change and light config changes
- Everything goes HTTP/1.1
- 30 % of our content is cached

But can we go further?

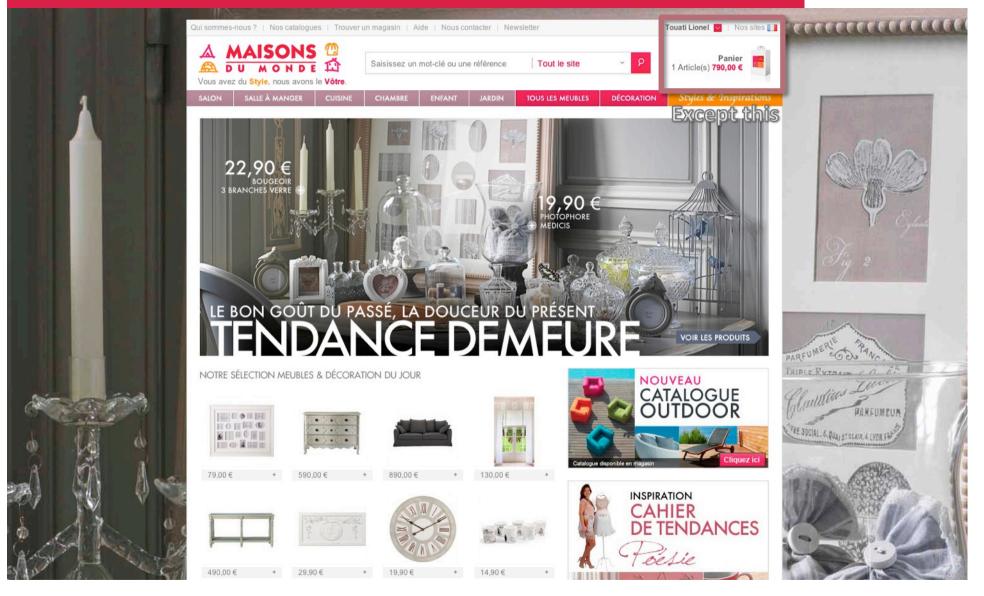


Caching dynamic HTML content.

- Helps performance as it:
 - Offloads Apache / DB and other systems
 - O Delivers the page quicker to the customer as it is stored in memory
- Nice side effect:
 - We can survive a DB crash, the site still shows up except the personalized part
- Mow we did it

OUR SITE IS STATIC





CACHING DYNAMIC CONTENT



Use a non-cacheable AJAX request for the dynamic part

Implement proper HTTP headers so varnish can cache your content

Do it step by step or you might produce wired results such as caching customer data



Tuning:

- Scan all your pages to make sure you're sending proper headers
- Understand vary headers specially if you cache content on a browser basis (as we do)
 - Read all docs on varnish
- Normalize as much as possible your requests (remove GA query parameters for example)
- Ask Varnish Software for help, they offer very good consulting services

FUTURE



Looking into building our own CDN with Varnish

Will probably use varnish as a WAF (already started) https://github.com/comotion/security.vcl

Plug our backoffice with Varnish (already started)

CONCLUSION



We have a fast and reliable website thanks to Varnish

We can cope with traffic increases

We've been able to double our traffic on a year/year basis while reducing our page load time by nearly 60 %



Q & A