



# Open Source CMS

## A performance comparision

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- Introduction
  - Products to Compare
  - Test Environment
- Test Cases (home, catalogue, product pages)
  - Performance
    - Google PageSpeed Inside
    - Speed Test using Pingdom
  - Scalability
    - Load Test using Blitz
  - Maintainability
    - Source Code – cloc
    - Community to maintain the source code
  - W3C Markup Validations
- Conclusion



# Introduction



# Introduction

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## Open Source Products, compared with Odoo

odoo cms

Drupal™

odoo commerce



- Version Saas4
- Standard Data / Modules
  - Demo data with Odoo Website, Commerce, Forum, News, etc

YourCompany

Home Shop Forum News Contact us | Sign in

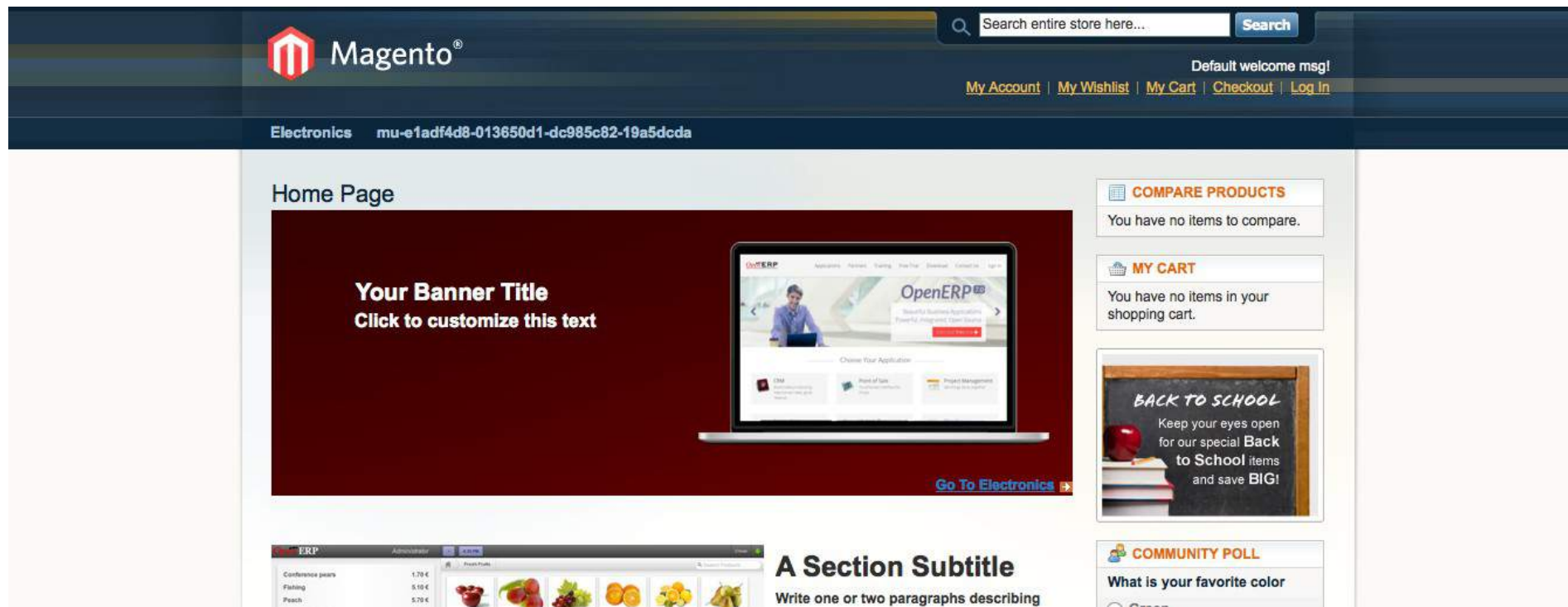
**Your Banner Title**

**Click to customize this text**

Contact us



- Version 1.8.1.0
- Custom Data / Module
  - Home page and widgets
  - Added some products and their description



The screenshot displays a Magento 1.8.1.0 storefront. The top navigation bar is dark blue, featuring the Magento logo, a search bar with the text "Search entire store here...", and links for "My Account", "My Wishlist", "My Cart", "Checkout", and "Log In". Below the navigation bar, the main content area is divided into several sections:

- Home Page:** A large red banner with the text "Your Banner Title" and "Click to customize this text". To the right of the banner is a laptop displaying the "OpenERP" website.
- COMPARE PRODUCTS:** A section with the text "You have no items to compare."
- MY CART:** A section with the text "You have no items in your shopping cart."
- BACK TO SCHOOL:** A promotional banner with the text "Keep your eyes open for our special Back to School items and save BIG!" and an image of a red apple.
- COMMUNITY POLL:** A section titled "What is your favorite color" with a radio button next to the word "Green".
- A Section Subtitle:** A section with the text "Write one or two paragraphs describing" and a row of product images including fruits and vegetables.

- Version 7.27
- Custom Data / Modules
  - CK-Editor & CK-Finder
  - Ubercart for e-commerce, Rules, ctools, views, entity



drupal.openerp.co.in

Home

Shop

## Navigation

- [Catalog](#)
- [Compose tips](#)
- [Shopping cart](#)

## User login

Username \*

admin

Password \*

.....

- [Create new account](#)
- [Request new password](#)

## HDD

Submitted by admin on Wed, 05/21/2014 - 19:02

30-day money-back guarantee

Free Shipping in U.S.

Buy now, get in 2 days

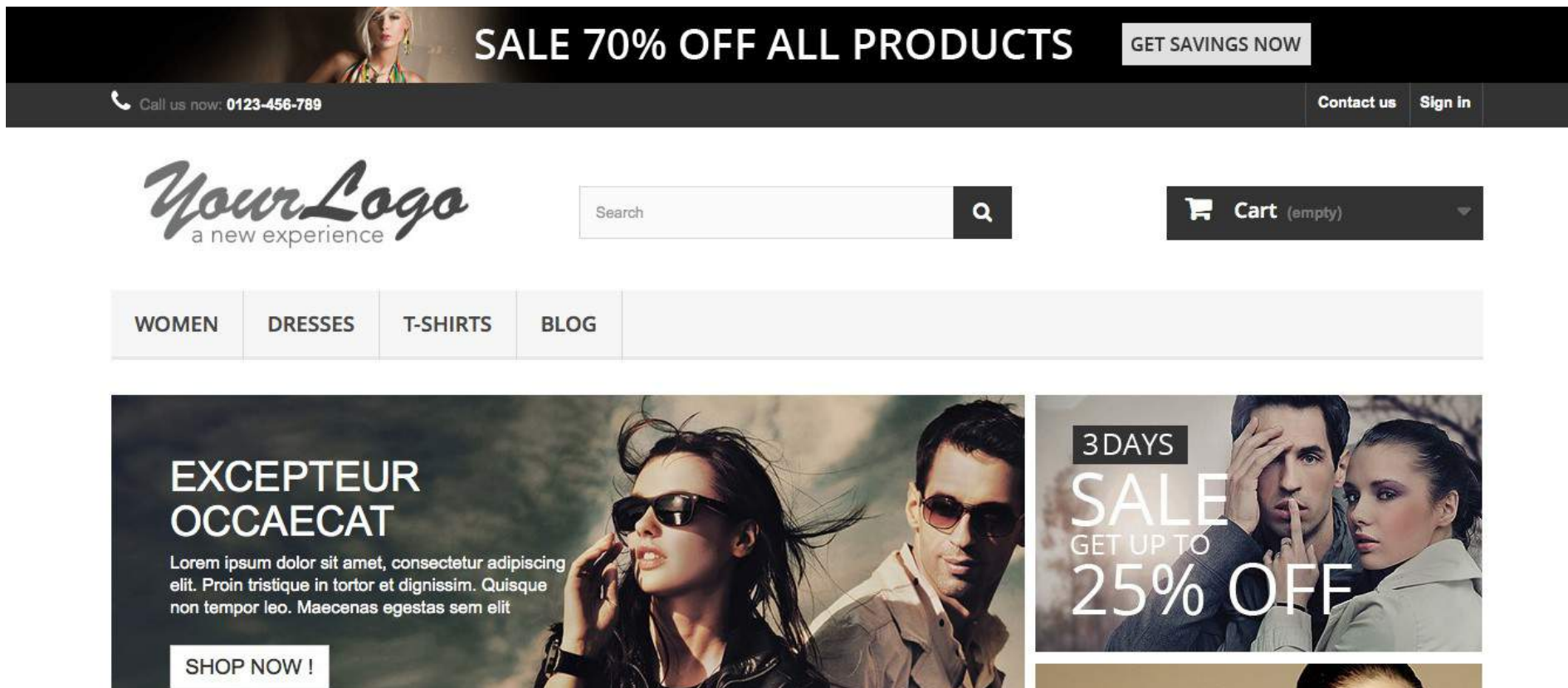
Our products are designed for small to medium size companies willing to optimize their performance.

Price: \$220.00

Add to cart

**\$220.00**[Read more](#) [Log in or register](#) to post comments

- Version 1.6
- No Custom Data / Modules
  - Use default demo shop







# Performance

Google PageSpeed Insight & Pingdom



# Google PageSpeed Insights

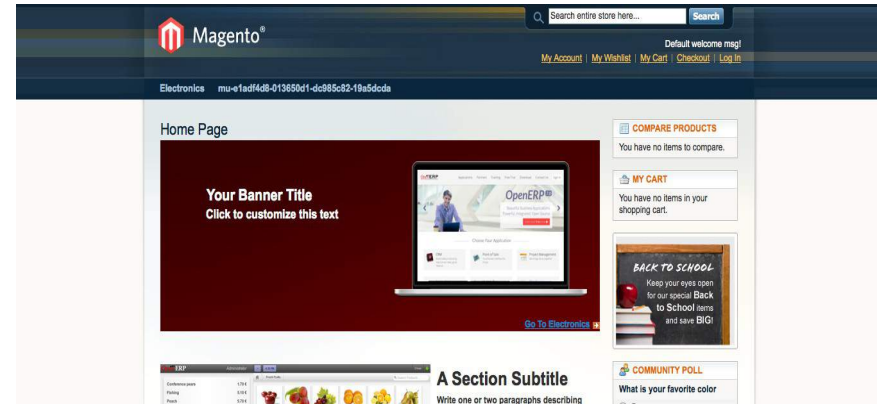
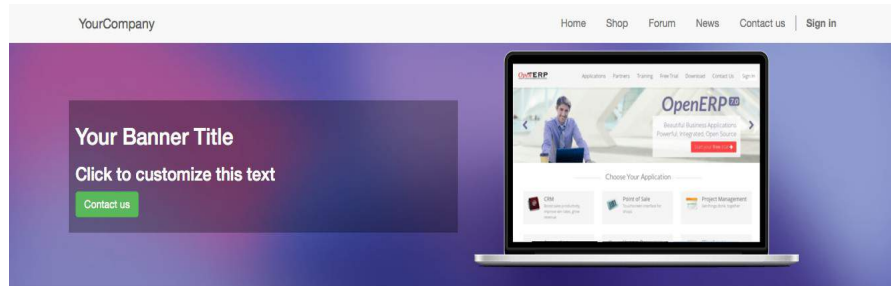
Home page on desktop

Computed by Google Page Speed Insight :

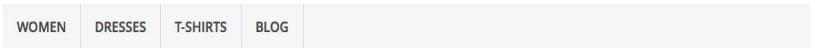
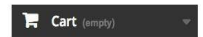
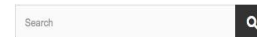
<https://developers.google.com/speed/pagespeed/insights/>



# Home Page




Your Logo  
a new experience






# Odoo vs Drupal

Using: Google PageSpeed Insights	Odoo ( ver. <u>Saas4</u> )	Drupal ( ver. 7.27 )
 Home Page	89 Rating	85 Rating
Render-blocking JavaScript ?	1	3
Render-blocking CSS ?	1	11
Minify Javascript	✓	✗
Minify CSS	✓	✗
Minify HTML	✓	✓
Leverage browser caching	✓	✗
Avoid landing page redirects ?	✓	✓
Fast Response Time	✓	✗

Computed by Google Page Speed Insight : <https://developers.google.com/speed/pagespeed/insights/>  
Rating is out of 100




# Odoo vs Magento

Using: Google PageSpeed Insights	Odoo ( ver. Saas4 )	Magento ( ver. 1.8.1.0 )
 Home Page	89 Rating	76 Rating
Render-blocking JavaScript ?	1	13
Render-blocking CSS ?	1	2
Minify Javascript	✓	✗
Minify CSS	✓	✗
Minify HTML	✓	✓
Leverage browser caching	✓	✗
Avoid landing page redirects ?	✓	✓
Fast Response Time	✓	✗


Computed by Google Page Speed Insight : <https://developers.google.com/speed/pagespeed/insights/>  
Rating is out of 100



# Odoo vs Prestashop

Using: Google PageSpeed Insights	Odoo ( ver. <u>Saas4</u> )	Prestashop ( ver. 1.6.0.6 )
 Home Page	89 Rating	66 Rating
Render-blocking JavaScript ?	1	0
Render-blocking CSS ?	1	25
Minify Javascript	✓	✗
Minify CSS	✓	✗
Minify HTML	✓	✗
Leverage browser caching	✓	✗
Avoid landing page redirects ?	✓	✓
Fast Response Time	✓	✗

Computed by Google Page Speed Insight : <https://developers.google.com/speed/pagespeed/insights/>  
Rating is out of 100

Using: Google PageSpeed Insights	Odoo ( ver. Saas4 )	Drupal ( ver. 7.27 )	Magento ( ver. 1.8.1.0 )	Prestashop ( ver. 1.6.0.6 )
 Home Page	89 Rating	85 Rating	76 Rating	66 Rating
Render-blocking JavaScript ?	1	3	13	0
Render-blocking CSS ?	1	11	2	25
Minify Javascript	✓	✗	✗	✗
Minify CSS	✓	✗	✗	✗
Minify HTML	✓	✓	✓	✗
Leverage browser caching	✓	✗	✗	✗
Avoid landing page redirects ?	✓	✓	✓	✓
Fast Response Time	✓	✗	✗	✗

Computed by Google Page Speed Insight : <https://developers.google.com/speed/pagespeed/insights/>  
 Rating is out of 100



# Google Page Speed Insights

Home page on mobile


Computed by Google Page Speed Insight :

<https://developers.google.com/speed/pagespeed/insights/>






# Odoo Vs Drupal

Using: Google PageSpeed Insights	Odoo ( ver. Saas4 )	Drupal ( ver. 7.27 )
 Home Page	User Exp. : 99 Rating Speed: 71 Rating	User Exp. : 88 Rating Speed: 68 Rating
Legible Font Size	✓	✓
Size tap targets appropriately	✓	✗
Viewport Configured	✓	✓
Viewport Content size	✓	✗

Computed by Google Page Speed Insight : <https://developers.google.com/speed/pagespeed/insights/>  
Rating is out of 100




# Odoo Vs Magento

Using: Google PageSpeed Insights	Odoo ( ver. Saas4 )	Magento ( ver. 1.8.1.0 )
 Home Page	User Exp. : 99 Rating Speed: 71 Rating	User Exp. : 58 Rating Speed: 64 Rating
Legible Font Size	✓	✗
Size tap targets appropriately	✓	✗
Viewport Configured	✓	✗
Viewport Content size	✓	✓

Computed by Google Page Speed Insight : <https://developers.google.com/speed/pagespeed/insights/>  
Rating is out of 100




# Odoo Vs Prestashop

Using: Google PageSpeed Insights	Odoo ( ver. Saas4 )	Prestashop ( ver. 1.6.0.6 )
 Home Page	User Exp. : 99 Rating Speed: 71 Rating	User Exp. : 99 Rating Speed: 55 Rating
Legible Font Size	✓	✓
Size tap targets appropriately	✓	✗
Viewport Configured	✓	✓
Viewport Content size	✓	✓

Computed by Google Page Speed Insight : <https://developers.google.com/speed/pagespeed/insights/>  
Rating is out of 100



# Summary : Google Page Speed

Using: Google PageSpeed Insights	Odoo ( ver. Saas4 )	Drupal ( ver. 7.27 )	Magento ( ver. 1.8.1.0 )	Prestashop ( ver. 1.6.0.6 )
 Home Page	User Exp. : 99 Rating Speed: 71 Rating	User Exp. : 88 Rating Speed: 68 Rating	User Exp. : 58 Rating Speed: 64 Rating	User Exp. : 99 Rating Speed: 55 Rating
Legible Font Size	✓	✓	✗	✓
Size tap targets appropriately	✓	✗	✗	✗
Viewport Configured	✓	✓	✗	✓
Viewport Content size	✓	✗	✓	✓

Computed by Google Page Speed Insight : <https://developers.google.com/speed/pagespeed/insights/>  
Rating is out of 100



# Google PageSpeed Insights

Product Catalogue on Desktop

Computed by Google Page Speed Insight :

<https://developers.google.com/speed/pagespeed/insights/>



# Odoo Vs Drupal

Using: Google PageSpeed Insights	Odoo ( ver. Saas4 )	Drupal ( ver. 7.27 )
 Product Catalog	84 Rating	89 Rating
Render-blocking JavaScript ?	3	4
Render-blocking CSS ?	3	10
Minify Javascript	✗	✗
Minify CSS	✗	✗
Minify HTML	✓	✓
Leverage browser caching	✓	✗
Avoid landing page redirects ?	✓	✓
Fast Response Time	✓	✗

Computed by Google Page Speed Insight : <https://developers.google.com/speed/pagespeed/insights/>  
Rating is out of 100

Using: Google PageSpeed Insights	Odoo ( ver. Saas4 )	Magento ( ver. 1.8.1.0 )
 Product Catalog	84 Rating	71 Rating
Render-blocking JavaScript ?	3	13
Render-blocking CSS ?	3	2
Minify Javascript	✗	✗
Minify CSS	✗	✗
Minify HTML	✓	✓
Leverage browser caching	✓	✗
Avoid landing page redirects ?	✓	✓
Fast Response Time	✓	✗

Computed by Google Page Speed Insight : <https://developers.google.com/speed/pagespeed/insights/>  
 Rating is out of 100




# Odoo Vs Prestashop

Using: Google PageSpeed Insights	Odoo ( ver. Saas4 )	Prestashop ( ver. 1.6.0.6 )
 Product Catalog	84 Rating	63 Rating
Render-blocking JavaScript ?	3	0
Render-blocking CSS ?	3	30
Minify Javascript	✗	✗
Minify CSS	✗	✗
Minify HTML	✓	✗
Leverage browser caching	✓	✗
Avoid landing page redirects ?	✓	✓
Fast Response Time	✓	✗

Computed by Google Page Speed Insight : <https://developers.google.com/speed/pagespeed/insights/>  
Rating is out of 100



Using: Google PageSpeed Insights	Odoo ( ver. Saas4 )	Drupal ( ver. 7.27 )	Magento ( ver. 1.8.1.0 )	Prestashop ( ver. 1.6.0.6 )
 Product Catalog	84 Rating	89 Rating	71 Rating	63 Rating
Render-blocking JavaScript ?	3	4	13	0
Render-blocking CSS ?	3	10	2	30
Minify Javascript	✗	✗	✗	✗
Minify CSS	✗	✗	✗	✗
Minify HTML	✓	✓	✓	✗
Leverage browser caching	✓	✗	✗	✗
Avoid landing page redirects ?	✓	✓	✓	✓
Fast Response Time	✓	✗	✗	✗

Computed by Google Page Speed Insight : <https://developers.google.com/speed/pagespeed/insights/>  
 Rating is out of 100



# Google PageSpeed Insights


Product Catalogue on Mobile

Computed by Google Page Speed Insight :

<https://developers.google.com/speed/pagespeed/insights/>




# Odoo Vs Drupal

Using: Google PageSpeed Insights	Odoo ( ver. Saas4 )	Drupal ( ver. 7.27 )
 Product Catalog	User Exp. : 98 Rating Speed: 68 Rating	User Exp. : 86 Rating  Speed: 73 Rating
Legible Font Size	✓	✓
Size tap targets appropriately	✓	✗
Viewport Configured	✓	✓
Viewport Content size	✓	✗

Computed by Google Page Speed Insight : <https://developers.google.com/speed/pagespeed/insights/>  
Rating is out of 100




# Odoo Vs Magento

Using: Google PageSpeed Insights	Odoo ( ver. Saas4 )	Magento ( ver. 1.8.1.0 )
 Product Catalog	User Exp. : 98 Rating Speed: 68 Rating	User Exp. : 59 Rating Speed: 59 Rating
Legible Font Size	✓	✗
Size tap targets appropriately	✓	✗
Viewport Configured	✓	✗
Viewport Content size	✓	✓

Computed by Google Page Speed Insight : <https://developers.google.com/speed/pagespeed/insights/>  
Rating is out of 100




# Odoo Vs Prestashop

Using: Google PageSpeed Insights	Odoo ( ver. Saas4 )	Prestashop ( ver. 1.6.0.6 )
 Product Catalog	User Exp. : 98 Rating Speed: 68 Rating	User Exp. : 99 Rating Speed: 48 Rating
Legible Font Size	✓	✓
Size tap targets appropriately	✓	✗
Viewport Configured	✓	✓
Viewport Content size	✓	✓

Computed by Google Page Speed Insight : <https://developers.google.com/speed/pagespeed/insights/>  
Rating is out of 100



# Summary : Google Page Speed

Using: Google PageSpeed Insights	Odoo ( ver. Saas4 )	Drupal ( ver. 7.27 )	Magento ( ver. 1.8.1.0 )	Prestashop ( ver. 1.6.0.6 )
 Product Catalog	User Exp. : 98 Rating Speed: 68 Rating	User Exp. : 86 Rating Speed: 73 Rating	User Exp. : 59 Rating Speed: 59 Rating	User Exp. : 99 Rating Speed: 48 Rating
Legible Font Size	✓	✓	✗	✓
Size tap targets appropriately	✓	✗	✗	✗
Viewport Configured	✓	✓	✗	✓
Viewport Content size	✓	✗	✓	✓

Computed by Google Page Speed Insight : <https://developers.google.com/speed/pagespeed/insights/>  
Rating is out of 100



# Google PageSpeed Insights


Product Page on Desktop

Computed by Google Page Speed Insight :

<https://developers.google.com/speed/pagespeed/insights/>



# Odoo Vs Drupal


Using: Google PageSpeed Insights	Odoo ( ver. Saas4 )	Drupal ( ver. 7.27 )
 Product Form	89 Rating	87 Rating
Render-blocking JavaScript ?	2	4
Render-blocking CSS ?	3	10
Minify Javascript	✓	✗
Minify CSS	✓	✗
Minify HTML	✓	✓
Leverage browser caching	✓	✗
Avoid landing page redirects ?	✓	✓
Fast Response Time	✗	✓

Computed by Google Page Speed Insight : <https://developers.google.com/speed/pagespeed/insights/>  
Rating is out of 100






# Odoo Vs Magento

Using: Google PageSpeed Insights	Odoo ( ver. Saas4 )	Magento ( ver. 1.8.1.0 )
 Product Form	89 Rating	70 Rating
Render-blocking JavaScript ?	2	17
Render-blocking CSS ?	3	3
Minify Javascript	✓	✗
Minify CSS	✓	✗
Minify HTML	✓	✓
Leverage browser caching	✓	✗
Avoid landing page redirects ?	✓	✓
Fast Response Time	✗	✗


Computed by Google Page Speed Insight : <https://developers.google.com/speed/pagespeed/insights/>  
Rating is out of 100



# Odoo Vs Prestashop

Using: Google PageSpeed Insights	Odoo ( ver. Saas4 )	Prestashop ( ver. 1.6.0.6 )
 Product Form	89 Rating	58 Rating
Render-blocking JavaScript ?	2	0
Render-blocking CSS ?	3	27
Minify Javascript	✓	✗
Minify CSS	✓	✗
Minify HTML	✓	✗
Leverage browser caching	✓	✗
Avoid landing page redirects ?	✓	✓
Fast Response Time	✗	✗

Computed by Google Page Speed Insight : <https://developers.google.com/speed/pagespeed/insights/>  
Rating is out of 100

Using: Google PageSpeed Insights	OpenERP ( ver. Saas4 )	Drupal ( ver. 7.27 )	Magento ( ver. 1.8.1.0 )	Prestashop ( ver. 1.6.0.6 )
 Product Form	89 Rating	87 Rating	70 Rating	58 Rating
Render-blocking JavaScript ?	2	4	17	0
Render-blocking CSS ?	3	10	3	27
Minify Javascript	✓	✗	✗	✗
Minify CSS	✓	✗	✗	✗
Minify HTML	✓	✓	✓	✗
Leverage browser caching	✓	✗	✗	✗
Avoid landing page redirects ?	✓	✓	✓	✓
Fast Response Time	✗	✓	✗	✗

Computed by Google Page Speed Insight : <https://developers.google.com/speed/pagespeed/insights/>  
 Rating is out of 100



# Google PageSpeed Insights


Product Page on Mobile

Computed by Google Page Speed Insight :

<https://developers.google.com/speed/pagespeed/insights/>




# Odoo Vs Drupal

Using: Google PageSpeed Insights	Odoo ( ver. Saas4 )	Drupal ( ver. 7.27 )
 Product Form	User Exp. : 96 Rating Speed: 71 Rating	User Exp. : 73 Rating Speed: 78 Rating
Legible Font Size	✓	✓
Size tap targets appropriately	✓	✗
Viewport Configured	✓	✓
Viewport Content size	✓	✗

Computed by Google Page Speed Insight : <https://developers.google.com/speed/pagespeed/insights/>  
Rating is out of 100




# Odoo Vs Magento

Using: Google PageSpeed Insights	Odoo ( ver. Saas4 )	Magento ( ver. 1.8.1.0 )
 Product Form	User Exp. : 96 Rating Speed: 71 Rating	User Exp. : 58 Rating Speed: 59 Rating
Legible Font Size	✓	✗
Size tap targets appropriately	✓	✗
Viewport Configured	✓	✗
Viewport Content size	✓	✓

Computed by Google Page Speed Insight : <https://developers.google.com/speed/pagespeed/insights/>  
Rating is out of 100




# Odoo Vs Prestashop

Using: Google PageSpeed Insights	Odoo ( ver. Saas4 )	Prestashop ( ver. 1.6.0.6 )
 Product Form	User Exp. : 96 Rating Speed: 71 Rating	User Exp. : 99 Rating Speed: 48 Rating
Legible Font Size	✓	✓
Size tap targets appropriately	✓	✗
Viewport Configured	✓	✓
Viewport Content size	✓	✓

Computed by Google Page Speed Insight : <https://developers.google.com/speed/pagespeed/insights/>  
Rating is out of 100



# Summary : Google Page Speed

Using: Google PageSpeed Insights	OpenERP ( ver. Saas4 )	Drupal ( ver. 7.27 )	Magento ( ver. 1.8.1.0 )	Prestashop ( ver. 1.6.0.6 )
 Product Form	User Exp. : 96 Rating Speed: 71 Rating	User Exp. : 73 Rating Speed: 78 Rating	User Exp. : 58 Rating Speed: 59 Rating	User Exp. : 99 Rating Speed: 48 Rating
Legible Font Size	✓	✓	✗	✓
Size tap targets appropriately	✓	✗	✗	✗
Viewport Configured	✓	✓	✗	✓
Viewport Content size	✓	✗	✓	✓

Computed by Google Page Speed Insight : <https://developers.google.com/speed/pagespeed/insights/>  
Rating is out of 100





# Speed Test using Pingdom

Resources Loads to render page



# Resources Load to render page

Home Page	Odoo ( ver. Saas4 )	Drupal ( ver. 7.27 )	Magento ( ver. 1.8.1.0 )	Prestashop ( ver. 1.6.0.6 )																																																																		
Performance Grade	91 / 100	87 / 100	85 / 100	59 / 100																																																																		
Requests	14	37	38	103																																																																		
# of JS	2	3	13	26																																																																		
# of CSS	2	19	3	27																																																																		
	<div><p>Time Spent per State</p><table><tr><td>Connect</td><td>35.57%</td><td><div></div></td></tr><tr><td>Wait</td><td>32.79%</td><td><div></div></td></tr><tr><td>Receive</td><td>31.20%</td><td><div></div></td></tr><tr><td>DNS</td><td>0.42%</td><td><div></div></td></tr><tr><td>Send</td><td>0.02%</td><td><div></div></td></tr></table></div>	Connect	35.57%	<div></div>	Wait	32.79%	<div></div>	Receive	31.20%	<div></div>	DNS	0.42%	<div></div>	Send	0.02%	<div></div>	<div><p>Time Spent per State</p><table><tr><td>Connect</td><td>48.73%</td><td><div></div></td></tr><tr><td>Wait</td><td>38.52%</td><td><div></div></td></tr><tr><td>Receive</td><td>12.10%</td><td><div></div></td></tr><tr><td>DNS</td><td>0.61%</td><td><div></div></td></tr><tr><td>Send</td><td>0.03%</td><td><div></div></td></tr></table></div>	Connect	48.73%	<div></div>	Wait	38.52%	<div></div>	Receive	12.10%	<div></div>	DNS	0.61%	<div></div>	Send	0.03%	<div></div>	<div><p>Time Spent per State</p><table><tr><td>Connect</td><td>51.44%</td><td><div></div></td></tr><tr><td>Wait</td><td>28.97%</td><td><div></div></td></tr><tr><td>Receive</td><td>17.25%</td><td><div></div></td></tr><tr><td>DNS</td><td>2.04%</td><td><div></div></td></tr><tr><td>SSL</td><td>0.26%</td><td><div></div></td></tr><tr><td>Send</td><td>0.04%</td><td><div></div></td></tr></table></div>	Connect	51.44%	<div></div>	Wait	28.97%	<div></div>	Receive	17.25%	<div></div>	DNS	2.04%	<div></div>	SSL	0.26%	<div></div>	Send	0.04%	<div></div>	<div><p>Time Spent per State</p><table><tr><td>Connect</td><td>84.52%</td><td><div></div></td></tr><tr><td>Wait</td><td>11.67%</td><td><div></div></td></tr><tr><td>Receive</td><td>3.28%</td><td><div></div></td></tr><tr><td>DNS</td><td>0.47%</td><td><div></div></td></tr><tr><td>SSL</td><td>0.05%</td><td><div></div></td></tr><tr><td>Send</td><td>0.01%</td><td><div></div></td></tr></table></div>	Connect	84.52%	<div></div>	Wait	11.67%	<div></div>	Receive	3.28%	<div></div>	DNS	0.47%	<div></div>	SSL	0.05%	<div></div>	Send	0.01%	<div></div>
Connect	35.57%	<div></div>																																																																				
Wait	32.79%	<div></div>																																																																				
Receive	31.20%	<div></div>																																																																				
DNS	0.42%	<div></div>																																																																				
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Connect	51.44%	<div></div>																																																																				
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Connect	84.52%	<div></div>																																																																				
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DNS	0.47%	<div></div>																																																																				
SSL	0.05%	<div></div>																																																																				
Send	0.01%	<div></div>																																																																				

As browser can load only 4 files in parallel on midsize traffic website, then latency time and number of resources to download impact time to load more resources

Odoo load **faster** because concatenate several files, minify and gzip the content, even all the modules installed

Product Catalogue	Odoo ( ver. Saas4 )	Drupal ( ver. 7.27 )	Magento ( ver. 1.8.1.0 )	Prestashop ( ver. 1.6.0.6 )
Performance Grade	89 / 100	87 / 100	85 / 100	75 / 100
# of Products on page	15	10	9	10
Requests	25	37	50	91
# of JS	4	4	13	28
# of CSS	4	19	3	30
	<div><p>Time Spent per State</p><div><div>Wait</div><div>38.91%</div><div></div></div><div><div>Receive</div><div>37.39%</div><div></div></div><div><div>Connect</div><div>23.67%</div><div></div></div><div><div>DNS</div><div>0.02%</div><div></div></div><div><div>Send</div><div>0.00%</div><div></div></div></div>	<div><p>Time Spent per State</p><div><div>Connect</div><div>57.15%</div><div></div></div><div><div>Wait</div><div>35.69%</div><div></div></div><div><div>Receive</div><div>6.82%</div><div></div></div><div><div>DNS</div><div>0.32%</div><div></div></div><div><div>Send</div><div>0.01%</div><div></div></div></div>	<div><p>Time Spent per State</p><div><div>Connect</div><div>66.65%</div><div></div></div><div><div>Wait</div><div>24.49%</div><div></div></div><div><div>Receive</div><div>7.97%</div><div></div></div><div><div>DNS</div><div>0.70%</div><div></div></div><div><div>SSL</div><div>0.17%</div><div></div></div><div><div>Send</div><div>0.02%</div><div></div></div></div>	<div><p>Time Spent per State</p><div><div>Connect</div><div>83.93%</div><div></div></div><div><div>Wait</div><div>14.09%</div><div></div></div><div><div>Receive</div><div>1.93%</div><div></div></div><div><div>DNS</div><div>0.06%</div><div></div></div><div><div>Send</div><div>0.01%</div><div></div></div></div>



# Resources Load to render page

Product Form	Odoo ( ver. Saas4 )	Drupal ( ver. 7.27 )	Magento ( ver. 1.8.1.0 )	Prestashop ( ver. 1.6.0.6 )
Performance Grade	84 / 100	87 / 100	86/100	58/ 100
Requests	13	31	54	74
# of JS	4	3	17	29
# of CSS	3	19	4	28
	<div><p>Time Spent per State</p><div><div>Receive</div><div>43.99%</div><div></div></div><div><div>Wait</div><div>36.11%</div><div></div></div><div><div>Connect</div><div>16.41%</div><div></div></div><div><div>DNS</div><div>3.48%</div><div></div></div><div><div>Send</div><div>0.00%</div><div></div></div></div>	<div><p>Time Spent per State</p><div><div>Connect</div><div>42.62%</div><div></div></div><div><div>Receive</div><div>28.61%</div><div></div></div><div><div>Wait</div><div>27.41%</div><div></div></div><div><div>DNS</div><div>1.13%</div><div></div></div><div><div>Send</div><div>0.02%</div><div></div></div></div>	<div><p>Time Spent per State</p><div><div>Connect</div><div>57.31%</div><div></div></div><div><div>Receive</div><div>22.39%</div><div></div></div><div><div>Wait</div><div>20.25%</div><div></div></div><div><div>DNS</div><div>0.03%</div><div></div></div><div><div>SSL</div><div>0.02%</div><div></div></div><div><div>Send</div><div>0.01%</div><div></div></div></div>	<div><p>Time Spent per State</p><div><div>Connect</div><div>82.74%</div><div></div></div><div><div>Wait</div><div>14.72%</div><div></div></div><div><div>Receive</div><div>2.06%</div><div></div></div><div><div>DNS</div><div>0.47%</div><div></div></div><div><div>Send</div><div>0.01%</div><div></div></div></div>



# Scaleablity

Using Blitz, simulate the 250 users



# Load Test using Blitz

Region – Virginia | Duration – 60 Seconds | Load – 1 To 250 Users

Computed using Blitz: <https://www.blitz.io>



## Magento, Prestashop, Drupa

- Ubuntu 14.04 latest LTS
- Apache 2.2 Server
- PHP 5 Framework
- MySQL Server 5.0

## Odoo

- Ubuntu 14.04 latest LTS
- Nginx 1.4
- Odoo Framework
- PostgreSQL 9.1



# Hardware Configuration

---

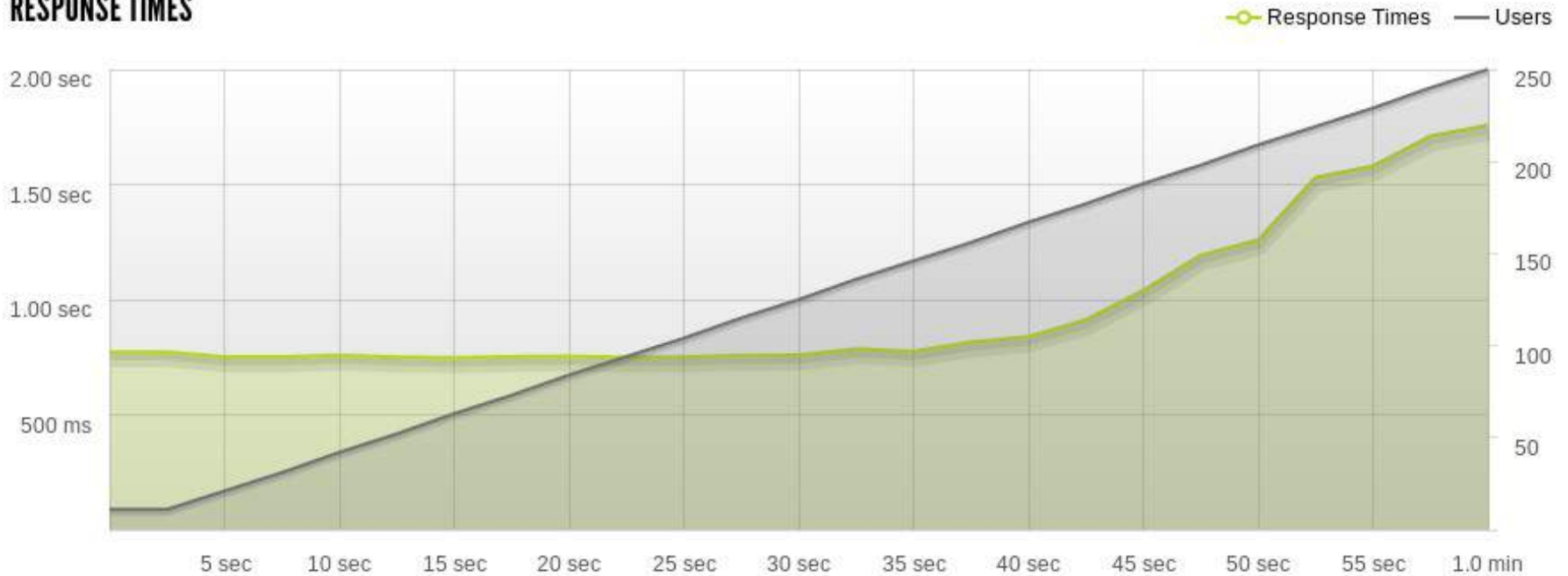
- IBM Server Series X3500 M4, 15 MB L3 Cache
- 300 GB GSAS Drive 10K RPMs
- Intel(R) Xeon(R) CPU E5-2620 0 @ 2.00GHz, 12 cores
- 8 GB Physical RAM
- 15 MBPS Dedicated Internet connection line

## Network:

- 15 MBPS dedicated Internet connection



## RESPONSE TIMES



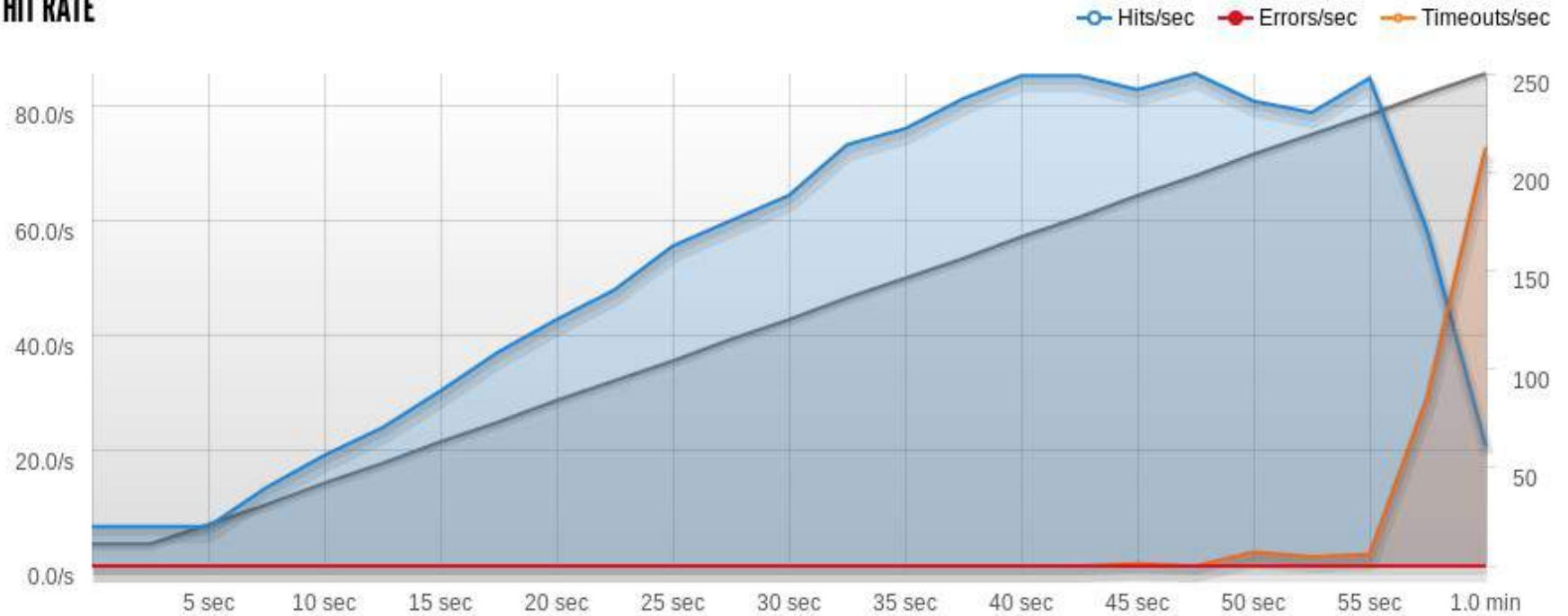
## Configuration :

Region – **Virginia** | Duration – **60 Seconds** | Load – **1 To 250 Users**

The max hit rate was: **88** hits per second

Website and Ecommerce apps installed

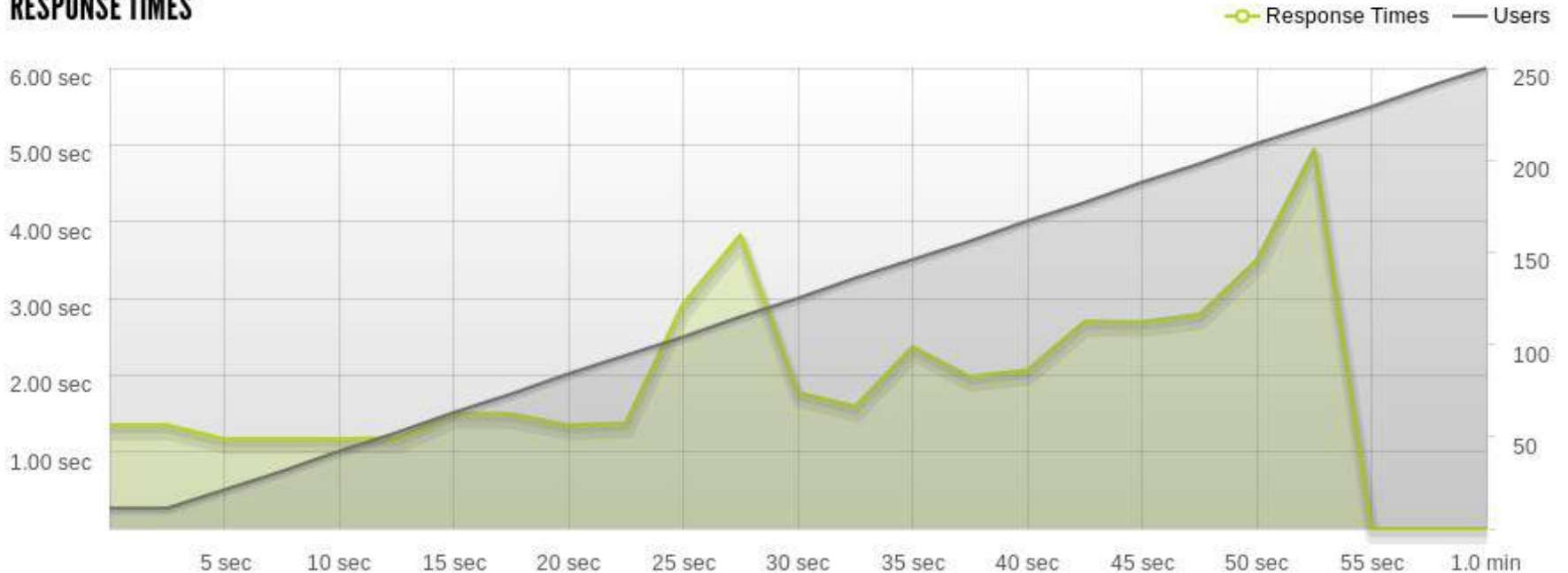
## HIT RATE



## Response Time :

- Fastest: **530 ms** | Slowest: **1655 ms** | Average: **829 ms**
- First time out happened at **47.4 second** at **198 users**
- **3646** successful hits in **60 sec**, avg **52,45,920 hits/day** capacity.

## RESPONSE TIMES

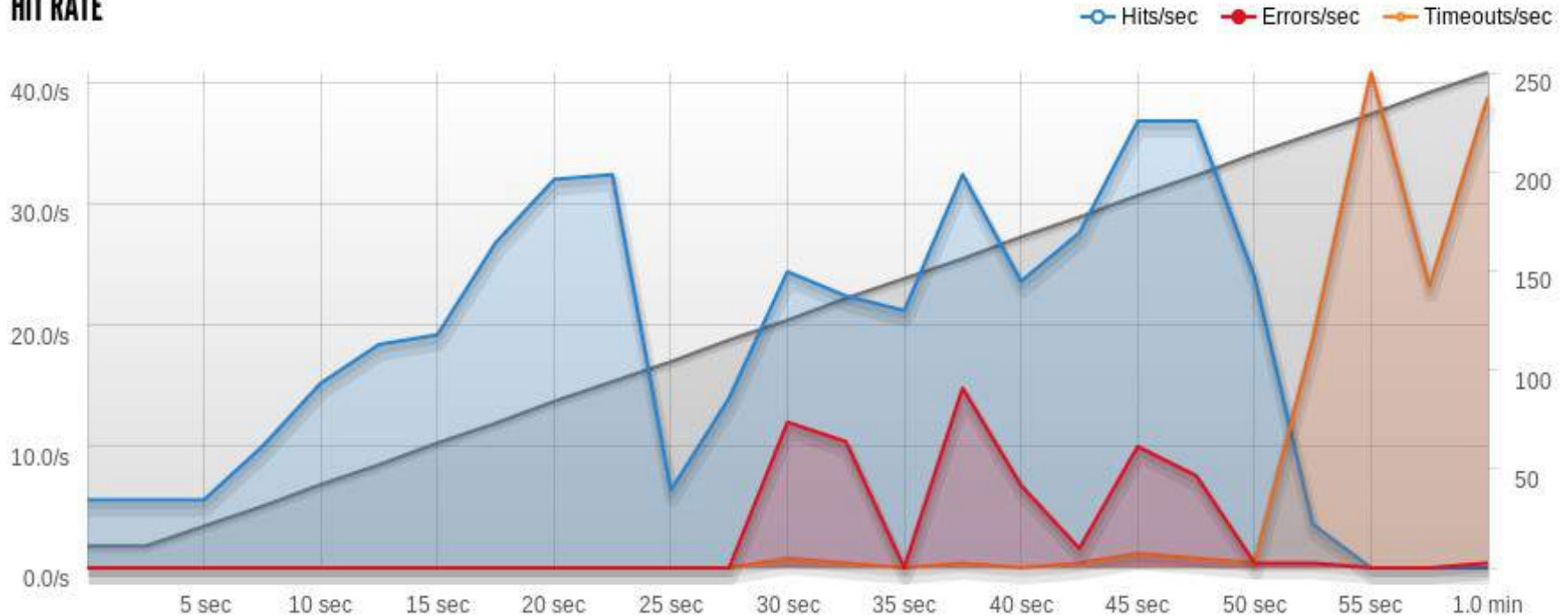


## Configuration :

Region – **Virginia** | Duration – **60 Seconds** | Load – **1 To 250 Users**

The max hit rate was : **37** hits per second

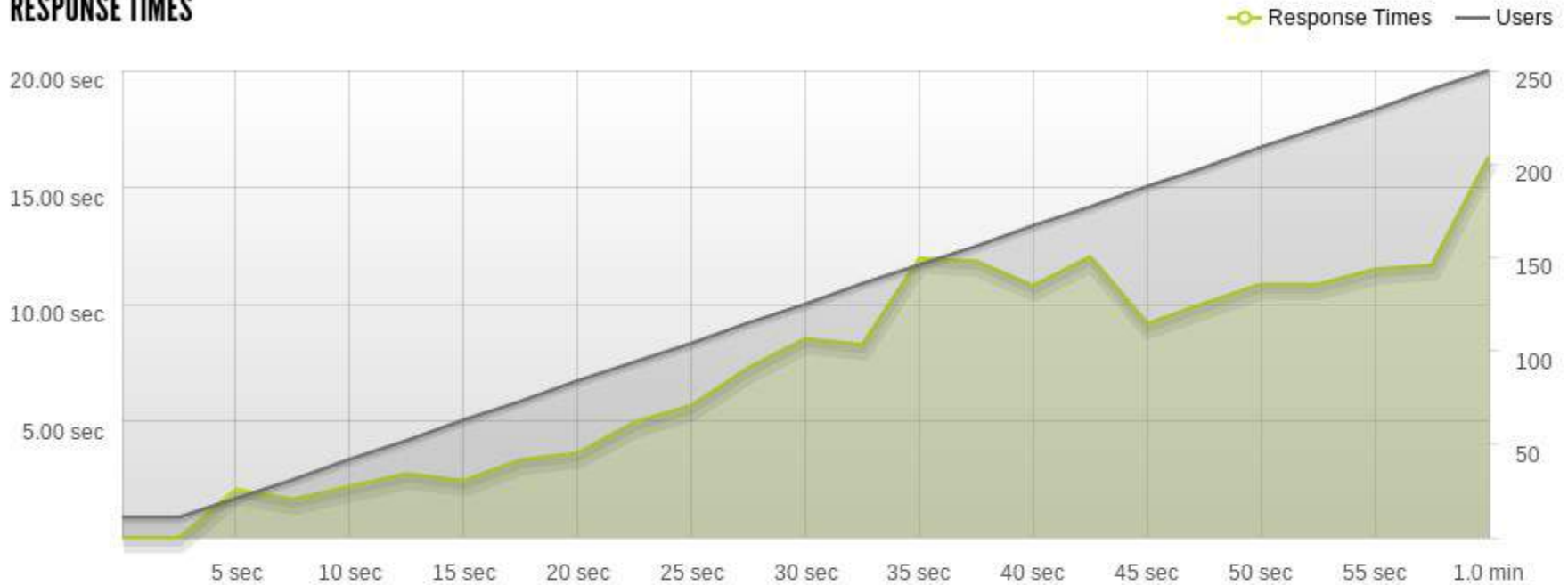
## HIT RATE



## Response Time :

- Fastest: **1172 ms** | Slowest: **4943 ms** | Average: **2141 ms**
- First time out happened at **30 second** at **125 users**
- **1,083** successful hits in **60 sec**, avg **15,59,520** hits/day capacity.

## RESPONSE TIMES

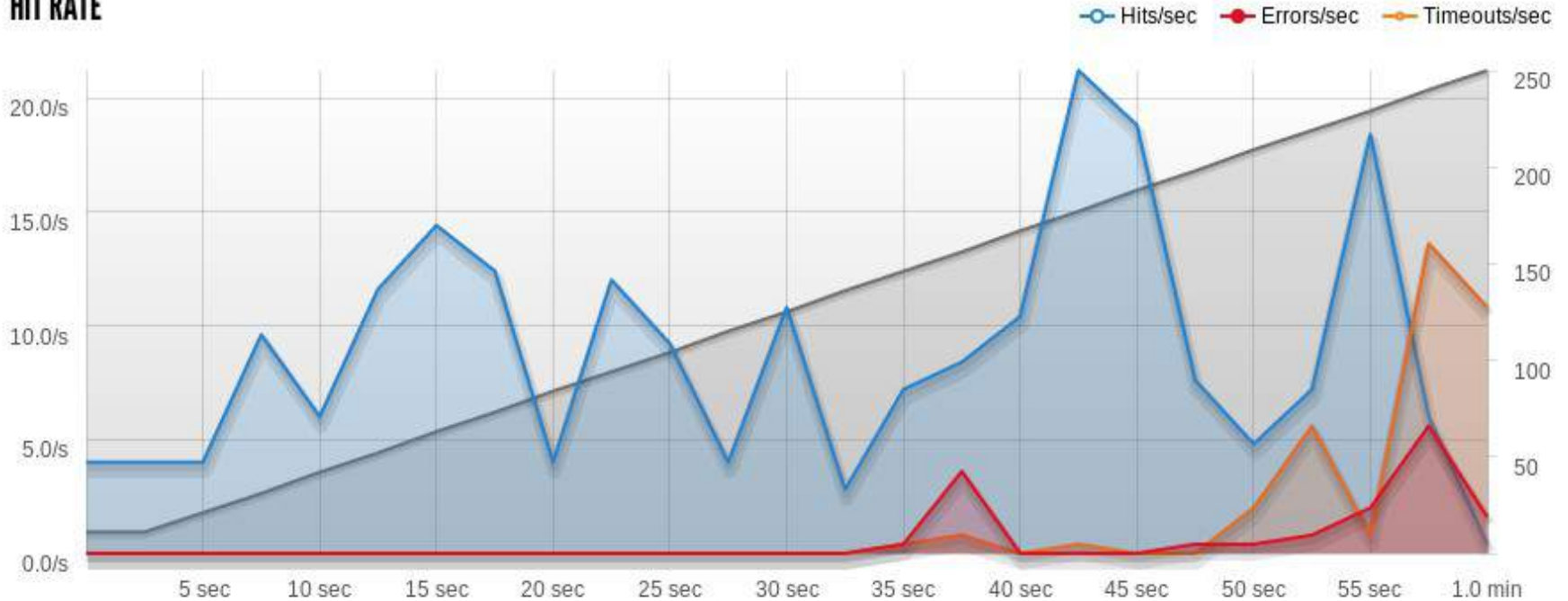


## Configuration :

Region – **Virginia** | Duration – **60 Seconds** | Load – **1 To 250 Users**

The max hit rate was : **21** hits per second

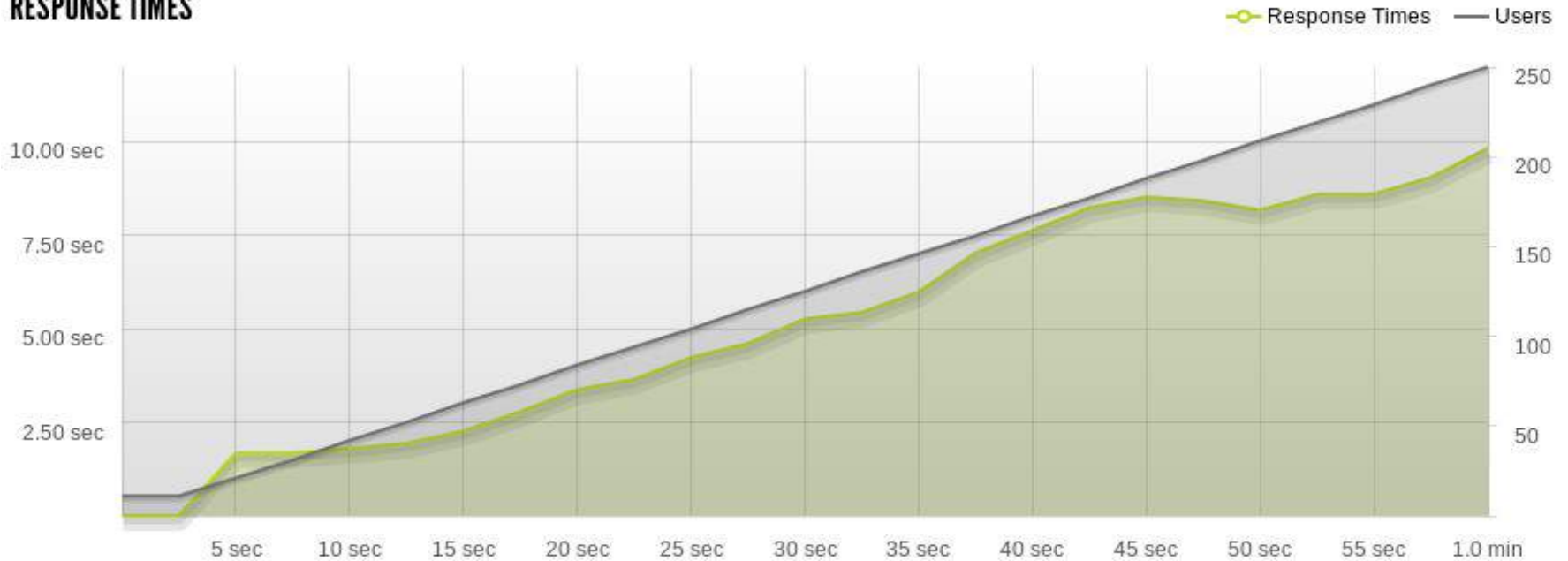
## HIT RATE



## Response Time :

- Fastest: **1639 ms** | Slowest: **16315 ms** | Average: **7813 ms**
- First time out happened at **35 second** at **146 users**
- **528** successful hits in **60 sec**, avg **0.7 M** hits/day capacity.

## RESPONSE TIMES

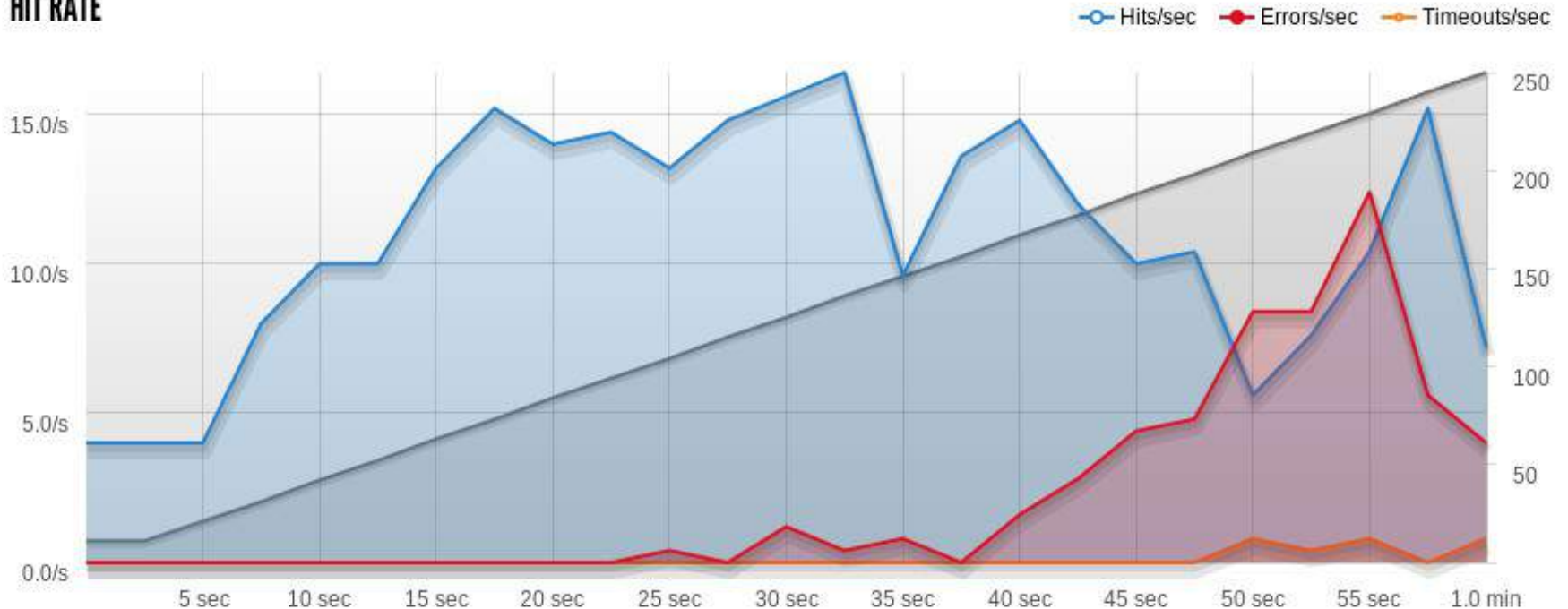


## Configuration :

Region – **Virginia** | Duration – **60 Seconds** | Load – **1 To 250 Users**

The max hit rate was : 16 hits per second

## HIT RATE









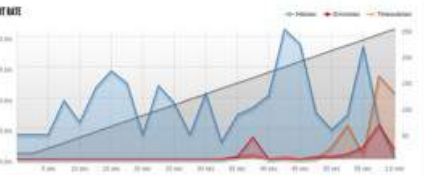

## Response Time :

- Fastest: **1678 ms** | Slowest: **9228 ms** | Average: **5598 ms**
- First time out happened at **25 second** at **104 users**
- **663** successful hits in **60 sec**, avg **0.95 M** hits/day capacity.





# Load Test Summary

Odoo ( ver. SaaS4 )	Drupal ( ver. 7.27 )	Magento ( ver. 1.8.1.0 )	Prestashop ( ver. 1.6.0.6 )
 <p>Response Time</p>	 <p>Response Time</p>	 <p>Response Time</p>	 <p>Response Time</p>
 <p>Hit Rate</p>	 <p>Hit Rate</p>	 <p>Hit Rate</p>	 <p>Hit Rate</p>
Successful Hits : 3646 (98.49%)	Successful Hits : 1083 (69.47%)	Successful Hits : 528 (81.11%)	Successful Hits : 1989 (82.05%)
Timeout : 56 (1.51%)	Timeout : 315 (20.21%)	Timeout : 86 (13.21%)	Timeout : 138 (17.08 %)
Error : 0 (0.0%)	Error : 161 (10.33%)	Error : 37 (5.68%)	Error : 7 (0.87%)
Data Transfer : 50.70 MB	Data Transfer : 39.04 MB	Data Transfer : 7.63 MB	Data Transfer : 62.19 MB
First Time Out : 47.4 sec	First Time Out : 30 sec	First Time Out : 35 sec	First Time Out : 25 sec
at 198 Users	at 125 Users	at 146 Users	at 104 Users

## Speed :

- Odoo is 3x times faster than the Drupal
- Odoo is 6x times faster than the Magento
- Odoo is 2x times faster than the Prestashop

## Scalability :

- Odoo timeout at 198 users
- Drupal timeout at 125 users
- Magento timeout at 148 users
- Prestashop timeout at 104 users



# W3C Markup Validation

HTML Validation



# W3C Check

Using: W3C Markup Validation	Odoo ( ver. Saas4 )	Drupal ( ver. 7.27 )	Magento ( ver. 1.8.1.0 )	Prestashop ( ver. 1.6.0.6 )
Home Page	29 Errors	0 Errors	2 Errors	4 Error
Product Catalogue	68 Errors	2 Errors	2 Errors	122 Errors
Product	10 Errors	0 Errors	1 Error	4 Errors

## Odoo's main problem

- Element meta is missing one or more of the following attributes: content, property.
- An img element must have an alt attribute, except under certain conditions
- The width attribute on the table element is obsolete. Use CSS instead.

Team is working on those issues , will be fixed soon



# Maintainability

lines of code and contributors



# Test 1 : Source Code

Code : using cloc	Odoo ( ver. Saas4 )	Drupal ( ver. 7.27 )	Magento ( ver. 1.8.1.0 )	Prestashop ( ver. 1.6.0.6 )
JavaScript	49K	124K	95K	56K
CSS	29K	28K	31K	74K
HTML / XML	8K + 376K	16K	6K + 295K	5k + 8K
Python / PHP	114K	58K + 99K	630K	223K

## Comparision between :

- Odoo : includes all modules. I.e accounting, wms, mrp, websites, etc...
- Drupal, Magento and Prestashop : only core modules

## Odoo is :

- 1.3x times smaller then the drupal
- 5.5x times smaller then the magento
- 1.9x times smaller then the prestashop

## In a Nutshell, Odoo...

- ... has had 95,464 commits made by 1,054 contributors representing 767,582 lines of code
- ... is mostly written in Python with an average number of source code comments
- ... has a well established, mature codebase maintained by a very large development team with decreasing Y-O-Y commits
- ... took an estimated 207 years of effort (COCOMO model) starting with its first commit in December, 2006 ending with its most recent commit about 1 month ago

## Languages



## Lines of Code



## 30 Day Summary

Mar 18 2014 — Apr 17 2014

1343 Commits

45 Contributors  
including 7 new contributors

## 12 Month Summary

Apr 17 2013 — Apr 17 2014

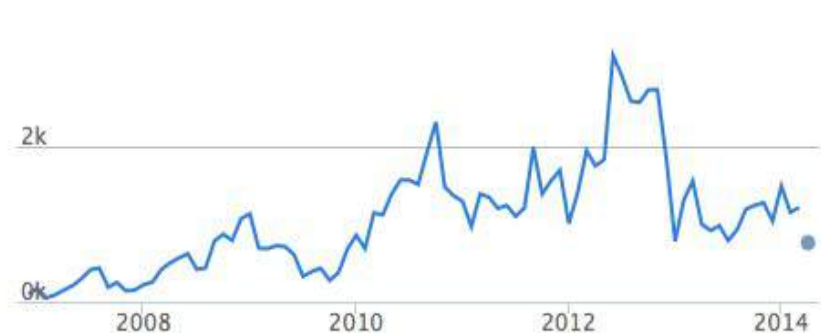
13571 Commits

Down -11979 (46%) from previous 12 months

179 Contributors

Down -87 (32%) from previous 12 months

## Commits per Month



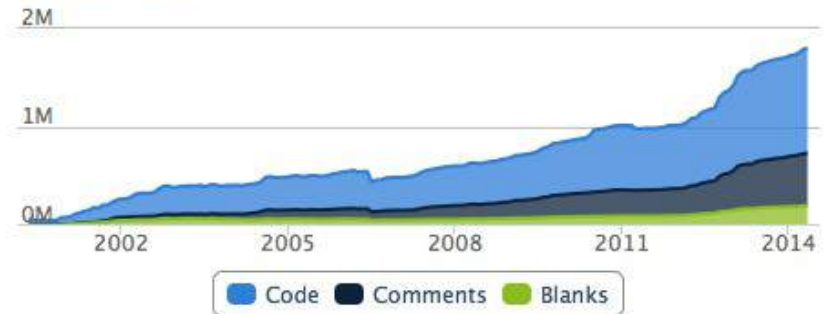
## In a Nutshell, Drupal (core)...

- ... has had 94,504 commits made by 149 contributors representing 1,060,131 lines of code
- ... is mostly written in PHP with an average number of source code comments
- ... has a well established, mature codebase maintained by a large development team with stable Y-O-Y commits
- ... took an estimated 297 years of effort (COCOMO model) starting with its first commit in May, 2000 ending with its most recent commit 2 days ago

## Languages



## Lines of Code



## 30 Day Summary

May 1 2014 — May 31 2014

289 Commits

6 Contributors

## 12 Month Summary

May 31 2013 — May 31 2014

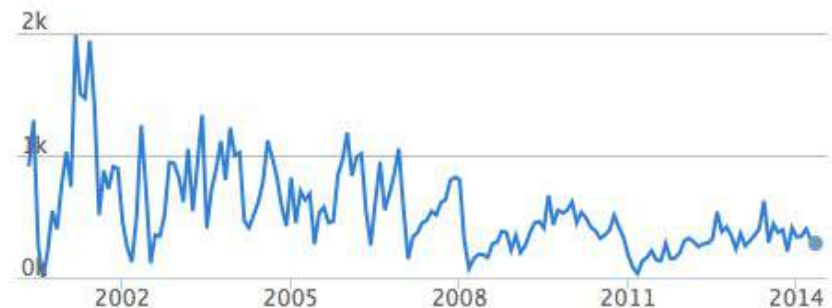
4527 Commits

Up +215 (4%) from previous 12 months

9 Contributors

Down -60 (86%) from previous 12 months

## Commits per Month





## In a Nutshell, Magento...

- ... has had 499 commits made by 8 contributors representing 8,331,528 lines of code
- ... is mostly written in PHP with a well-commented source code
- ... has a well established, mature codebase maintained by a average size development team with stable Y-O-Y commits
- ... took an estimated 2,536 years of effort (COCOMO model) starting with its first commit in June, 2008 ending with its most recent commit 3 days ago

## Languages



## Lines of Code



## 30 Day Summary

Apr 30 2014 — May 30 2014

5 Commits  
1 Contributor

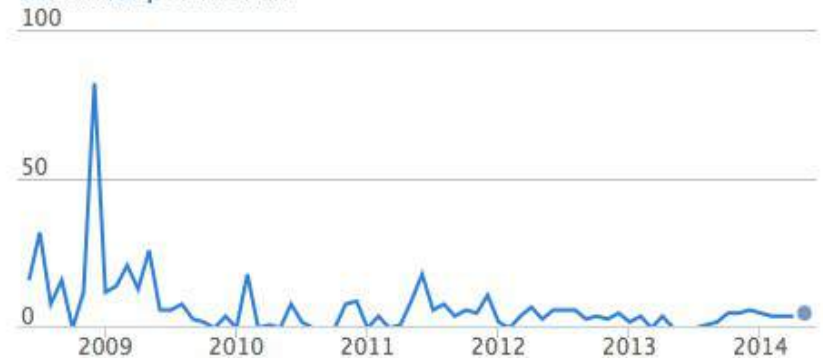
## 12 Month Summary

May 30 2013 — May 30 2014

41 Commits  
Down -2 (4%) from previous 12 months

4 Contributors  
Up +2 (100%) from previous 12 months

## Commits per Month



## In a Nutshell, PrestaShop...

... has had 25,861 commits made by 277 contributors representing 284,845 lines of code

... is mostly written in PHP with an average number of source code comments

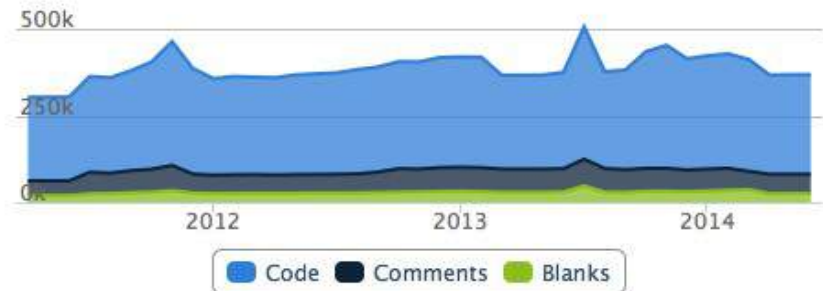
... has a codebase with a long source history maintained by a very large development team with stable Y-O-Y commits

... took an estimated 74 years of effort (COCOMO model) starting with its first commit in April, 2011 ending with its most recent commit 3 days ago

## Languages



## Lines of Code



## 30 Day Summary

May 2 2014 — Jun 1 2014

344 Commits

34 Contributors

including 12 new contributors

## 12 Month Summary

Jun 1 2013 — Jun 1 2014

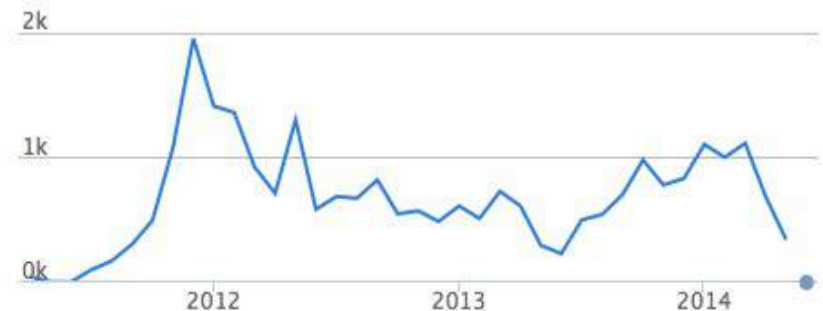
8836 Commits

Up +1689 (23%) from previous 12 months

197 Contributors

Up +106 (116%) from previous 12 months

## Commits per Month





# Conclusion



# Conclusion

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## Performance :

- Odoo is 3x times faster than the Drupal
- Odoo is 6x times faster than the Magento
- Odoo is 2x times faster than the Prestashop

## Scalability :

- Odoo timeout at 198 users
- Drupal timeout at 125 users
- Magento timeout at 148 users
- Prestashop timeout at 104 users

## Maintainability :

- 1.3x times smaller then the drupal
- 5.5x times smaller then the magento
- 1.9x times smaller then the prestashop



Questions ?



# Thank You

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