



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

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

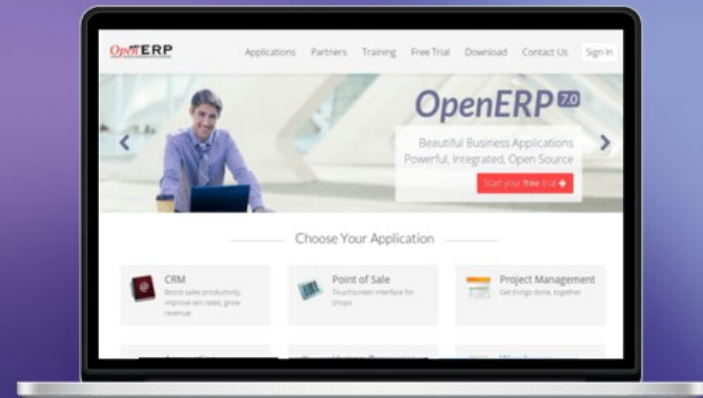
YourCompany

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 with a custom layout. The header features the Magento logo, a search bar, and navigation links. The main content area includes a large banner for 'Your Banner Title', a 'COMPARE PRODUCTS' widget, a 'MY CART' widget, and a 'COMMUNITY POLL' widget. A section titled 'A Section Subtitle' contains a product list and a description area.

Header:

- Magento®
- Search entire store here...
- Default welcome msg!
- [My Account](#) | [My Wishlist](#) | [My Cart](#) | [Checkout](#) | [Log In](#)

Home Page:

Your Banner Title
Click to customize this text

COMPARE PRODUCTS
You have no items to compare.

MY CART
You have no items in your shopping cart.

COMMUNITY POLL
What is your favorite color
Green

A Section Subtitle
Write one or two paragraphs describing

Product List:

| Product Name | Price |
|------------------|--------|
| Conference pears | 1.70 € |
| Fishing | 5.10 € |
| Peach | 5.70 € |

- 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

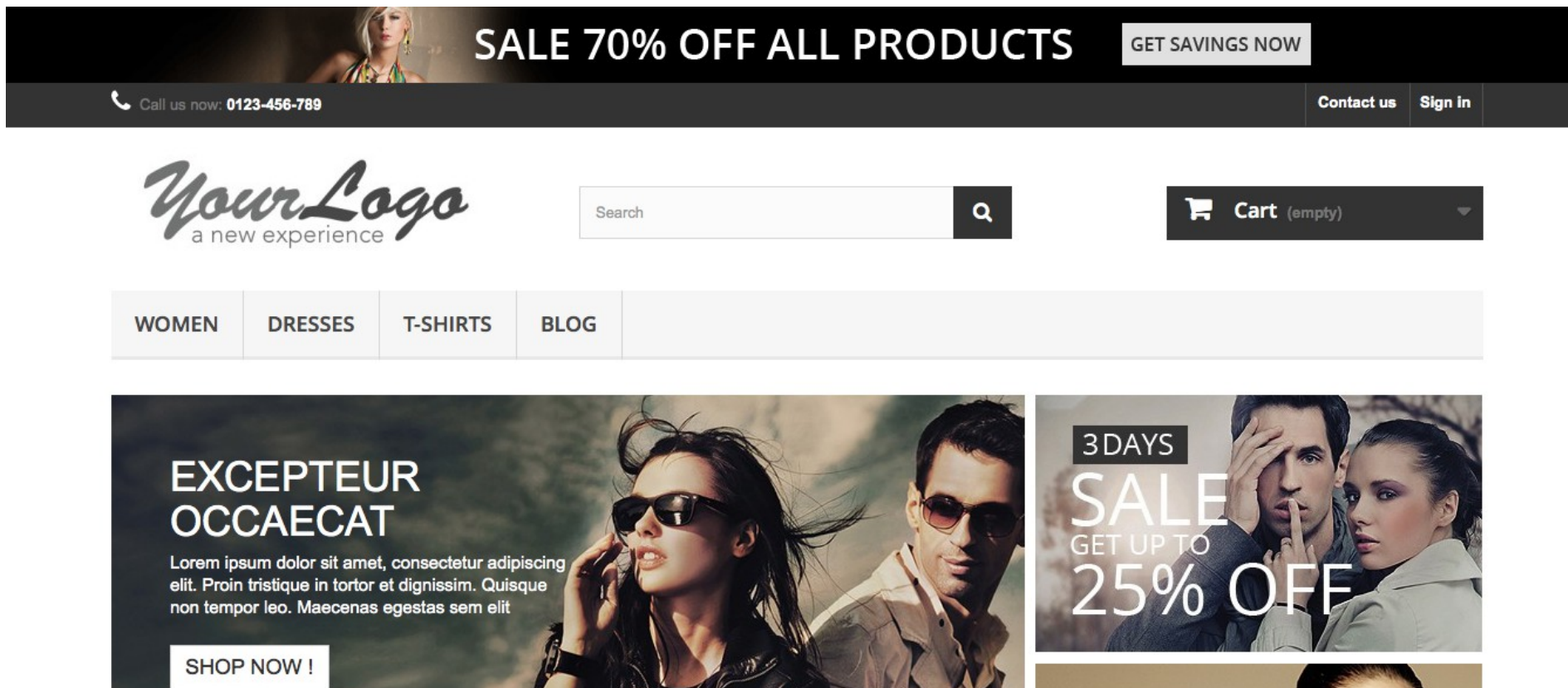
Our products are designed for small to medium size companies willing to optimize their performance.

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

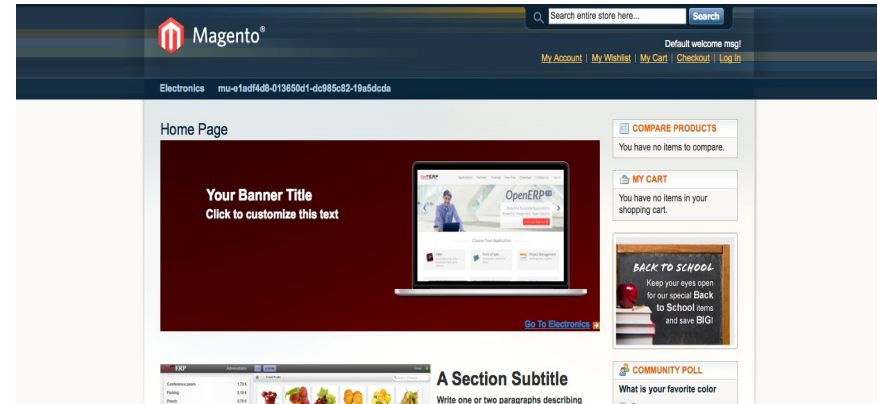
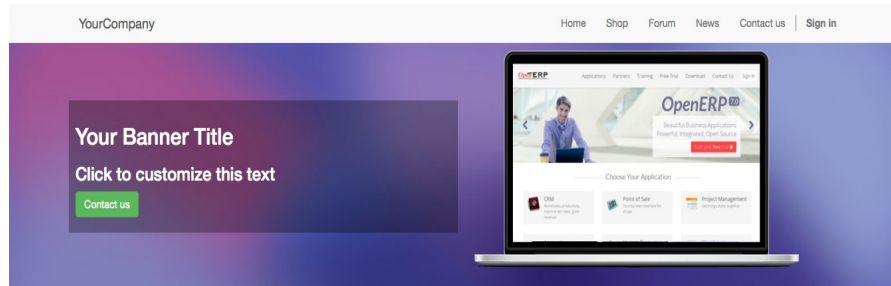
Home page on desktop

Computed by Google Page Speed Insight :

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



Home Page



Navigation

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

User login

Username *

admin

Password *

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

HDD

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Price: \$220.00

[Add to cart](#)



[Read more](#) [Log in or register to post comments](#)

\$220.00



Your Logo
a new experience

Search

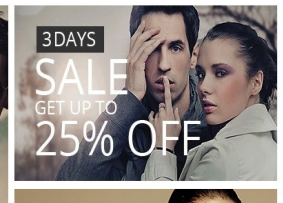
Cart (empty)

WOMEN

DRESSES


T-SHIRTS

BLOG






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




Odoo Vs Magento

| 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



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 | 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></td></tr><tr><td>Wait</td><td>32.79%</td><td></td></tr><tr><td>Receive</td><td>31.20%</td><td></td></tr><tr><td>DNS</td><td>0.42%</td><td></td></tr><tr><td>Send</td><td>0.02%</td><td></td></tr></table></div> | Connect | 35.57% | | Wait | 32.79% | | Receive | 31.20% | | DNS | 0.42% | | Send | 0.02% | | <div><p>Time Spent per State</p><table><tr><td>Connect</td><td>48.73%</td><td></td></tr><tr><td>Wait</td><td>38.52%</td><td></td></tr><tr><td>Receive</td><td>12.10%</td><td></td></tr><tr><td>DNS</td><td>0.61%</td><td></td></tr><tr><td>Send</td><td>0.03%</td><td></td></tr></table></div> | Connect | 48.73% | | Wait | 38.52% | | Receive | 12.10% | | DNS | 0.61% | | Send | 0.03% | | <div><p>Time Spent per State</p><table><tr><td>Connect</td><td>51.44%</td><td></td></tr><tr><td>Wait</td><td>28.97%</td><td></td></tr><tr><td>Receive</td><td>17.25%</td><td></td></tr><tr><td>DNS</td><td>2.04%</td><td></td></tr><tr><td>SSL</td><td>0.26%</td><td></td></tr><tr><td>Send</td><td>0.04%</td><td></td></tr></table></div> | Connect | 51.44% | | Wait | 28.97% | | Receive | 17.25% | | DNS | 2.04% | | SSL | 0.26% | | Send | 0.04% | | <div><p>Time Spent per State</p><table><tr><td>Connect</td><td>84.52%</td><td></td></tr><tr><td>Wait</td><td>11.67%</td><td></td></tr><tr><td>Receive</td><td>3.28%</td><td></td></tr><tr><td>DNS</td><td>0.47%</td><td></td></tr><tr><td>SSL</td><td>0.05%</td><td></td></tr><tr><td>Send</td><td>0.01%</td><td></td></tr></table></div> | Connect | 84.52% | | Wait | 11.67% | | Receive | 3.28% | | DNS | 0.47% | | SSL | 0.05% | | Send | 0.01% | |
| Connect | 35.57% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Wait | 32.79% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Receive | 31.20% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| DNS | 0.42% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Send | 0.02% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Connect | 48.73% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Wait | 38.52% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Receive | 12.10% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| DNS | 0.61% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Send | 0.03% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Connect | 51.44% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Wait | 28.97% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Receive | 17.25% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| DNS | 2.04% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SSL | 0.26% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Send | 0.04% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Connect | 84.52% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Wait | 11.67% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Receive | 3.28% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| DNS | 0.47% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SSL | 0.05% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Send | 0.01% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

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



Resources Load to render page

| Product Catalogue | Odoo (ver. <u>Saas4</u>) | 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>0.05%</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>42.82%</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



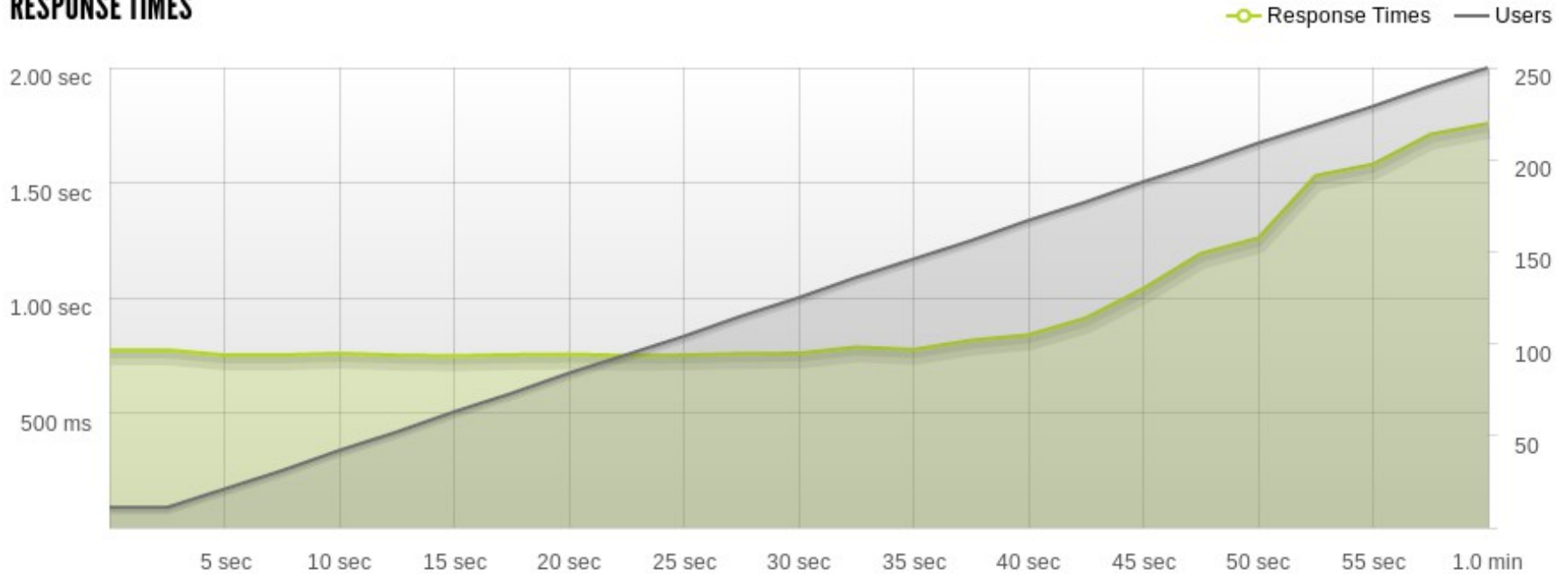
Hardware Configuration

- 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



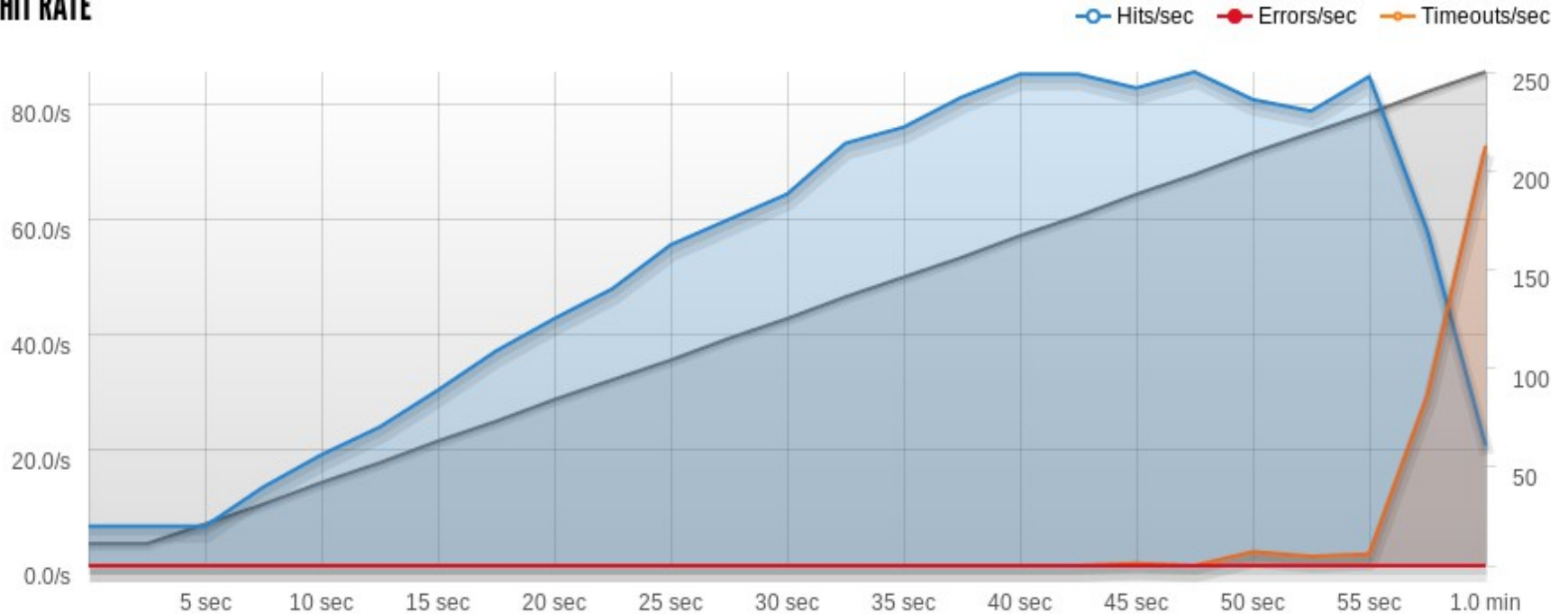
Configuration :

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

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

Website and Ecommerce apps installed

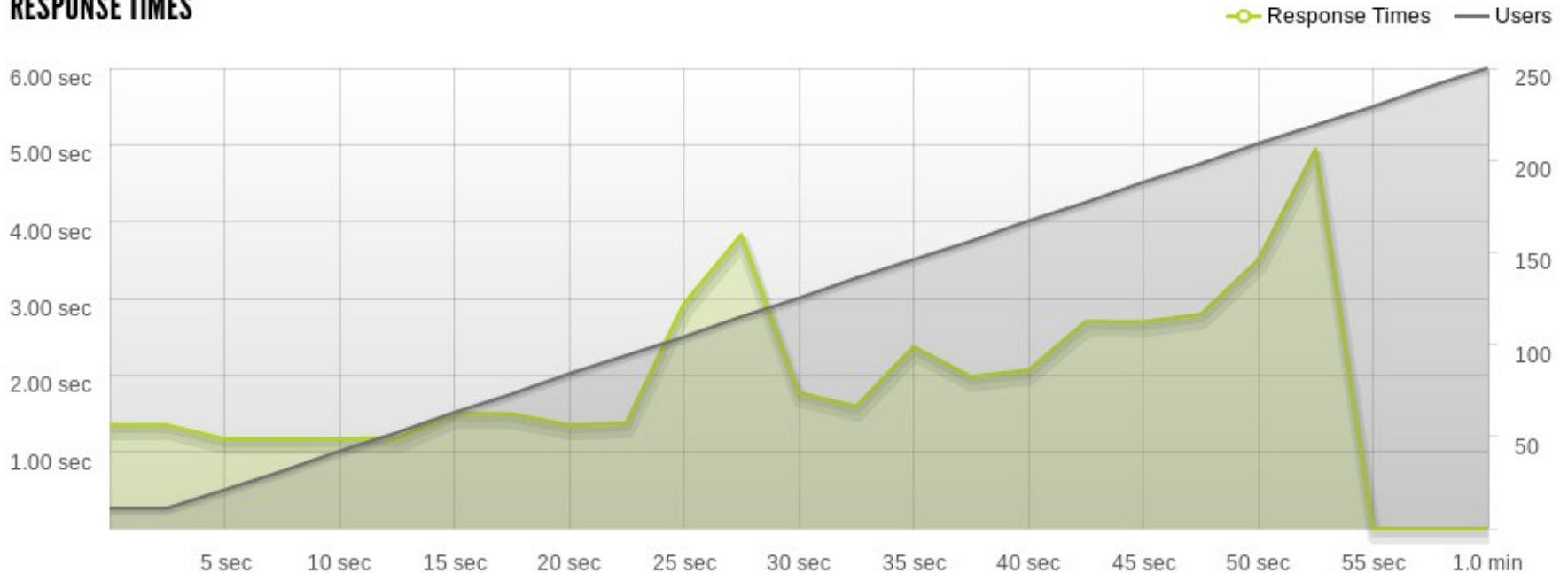
HIT RATE



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

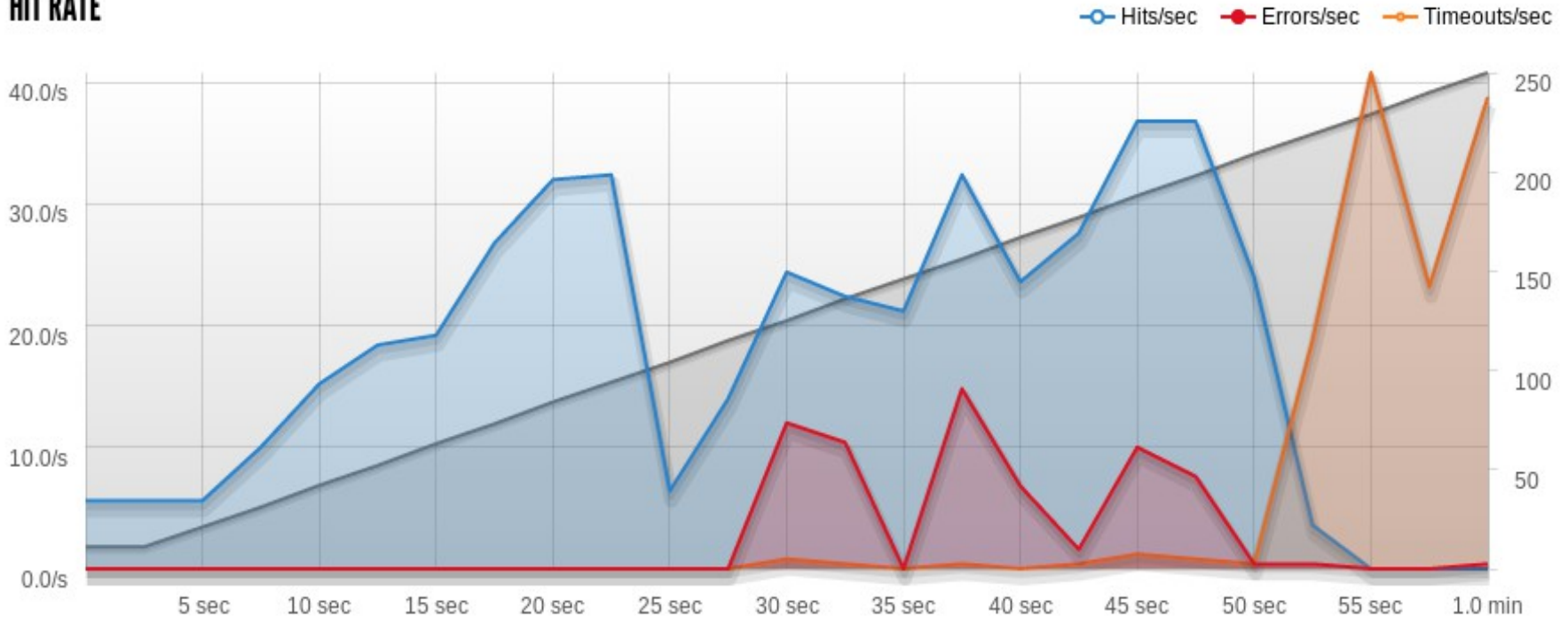


Configuration :

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

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

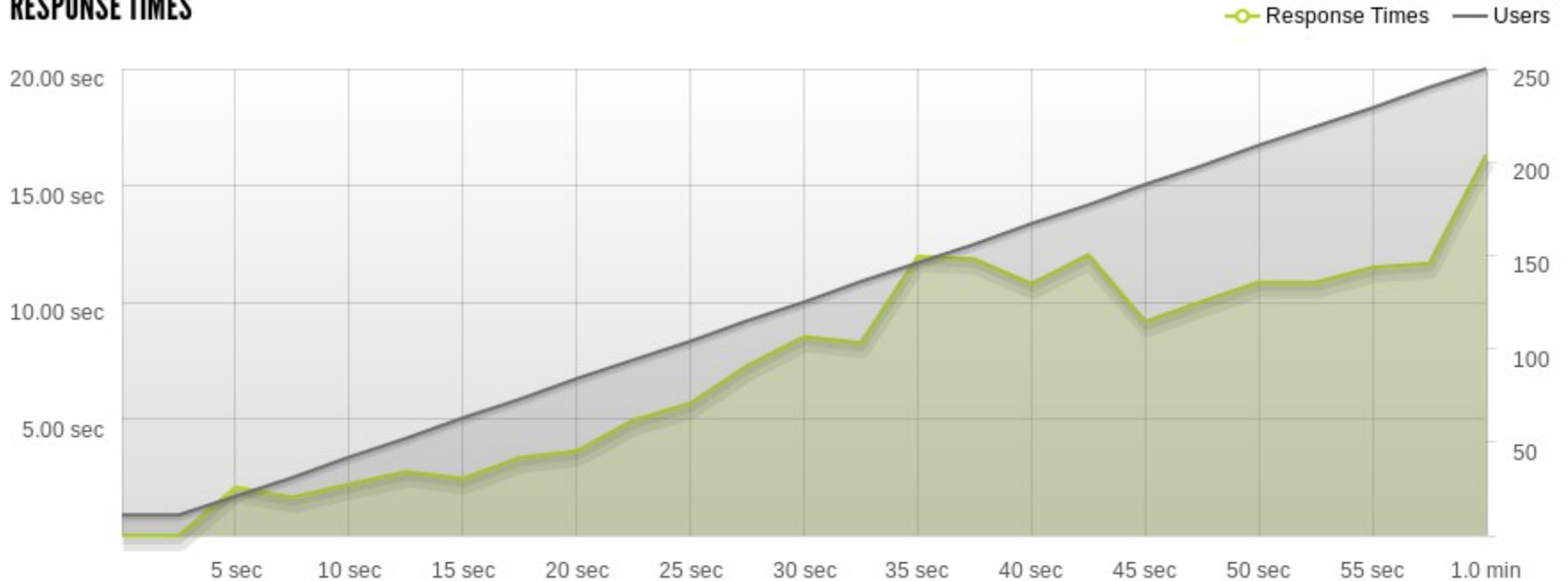
HIT RATE



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

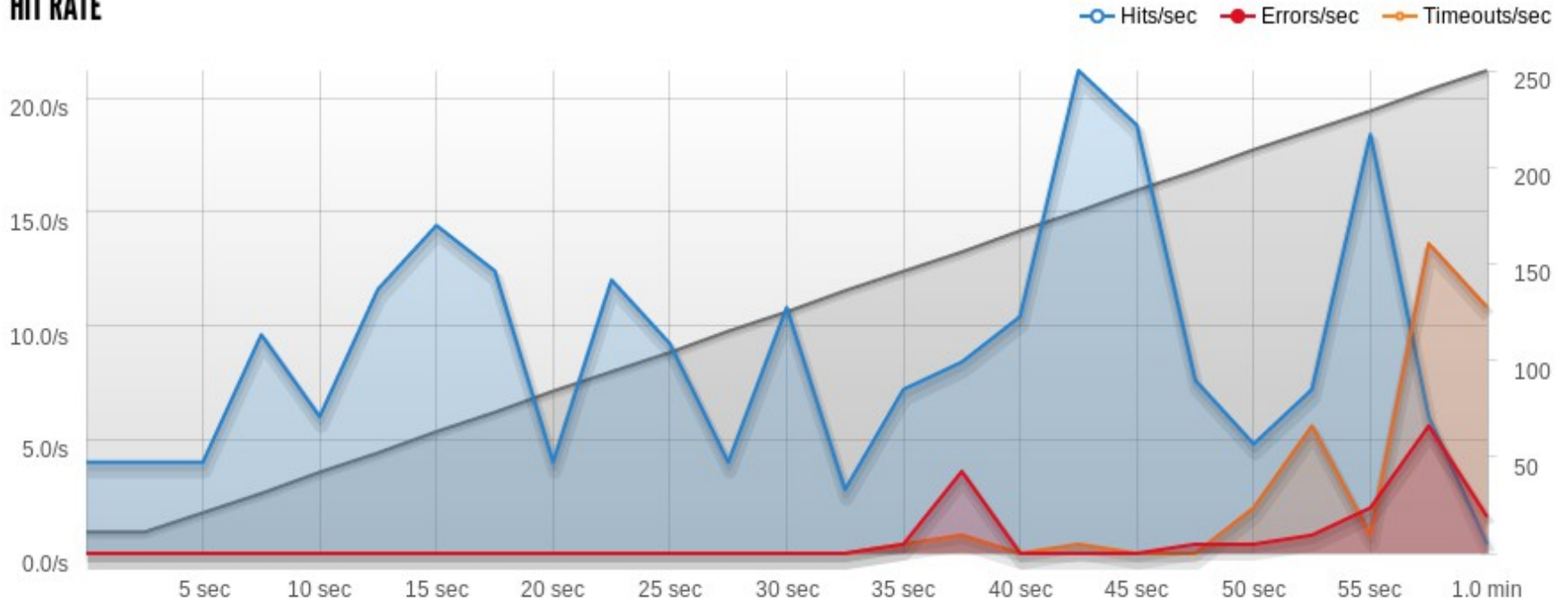


Configuration :

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

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

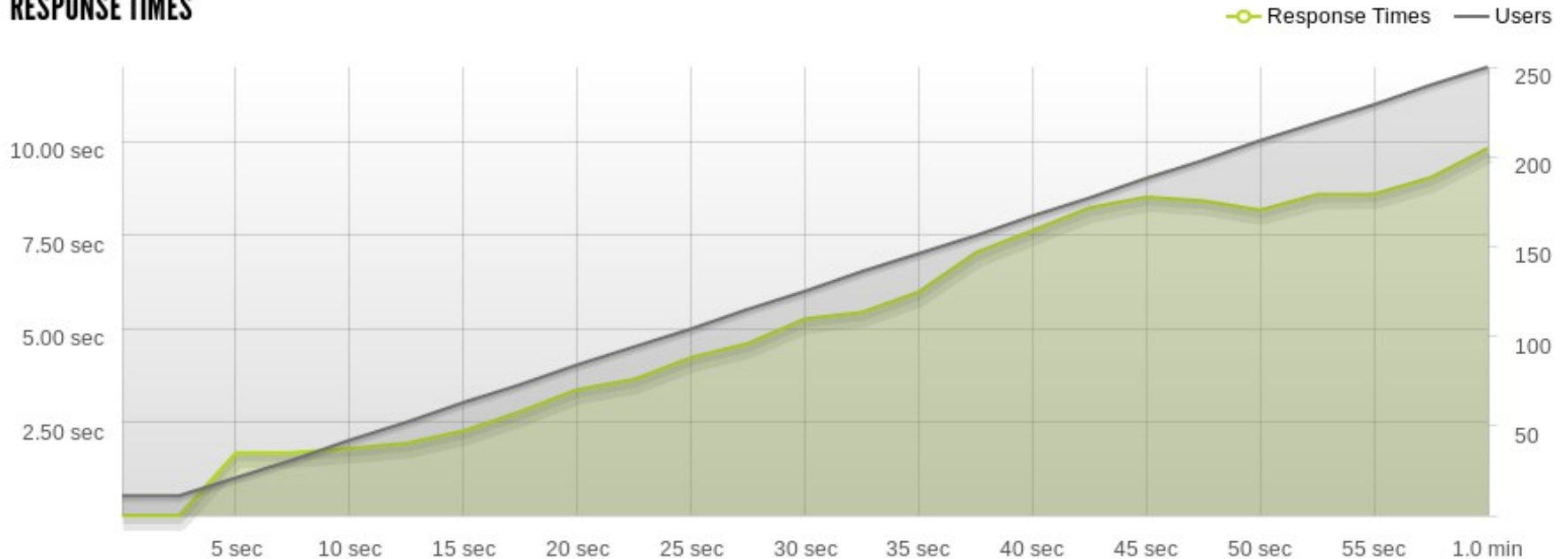
HIT RATE



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

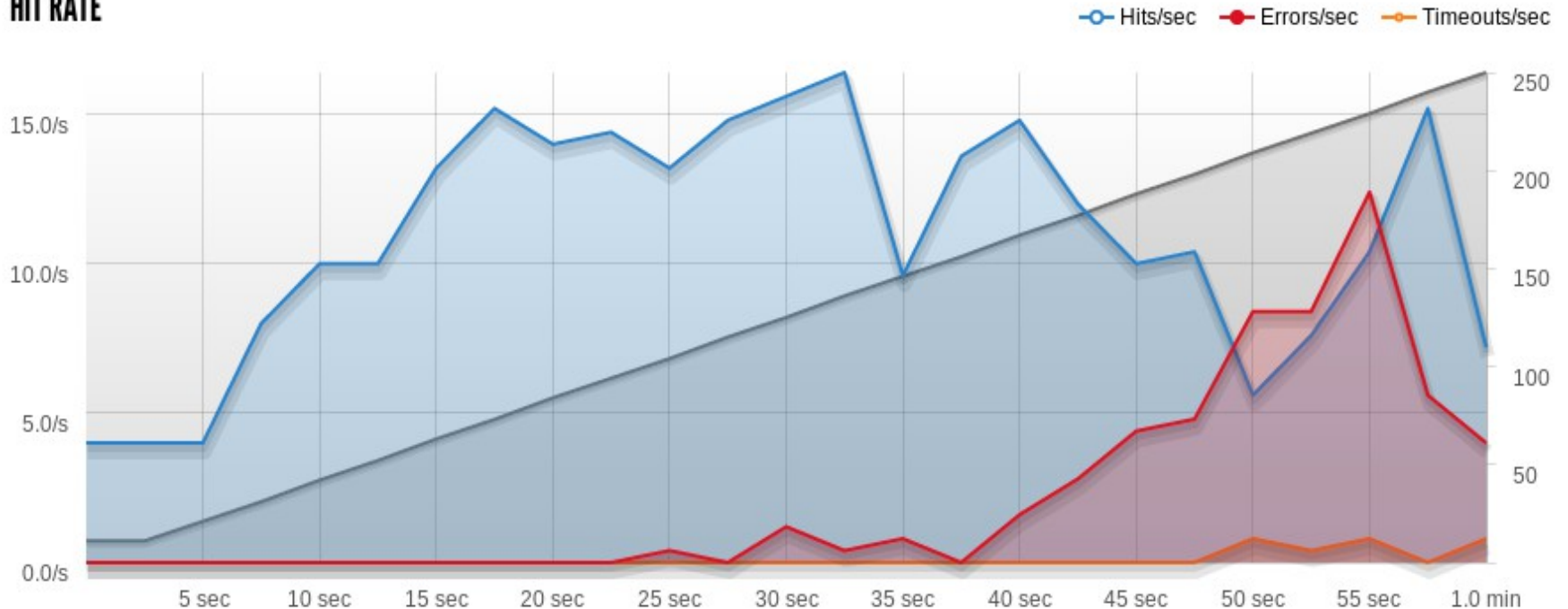


Configuration :

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

The max hit rate was : 16 hits per second

HIT RATE

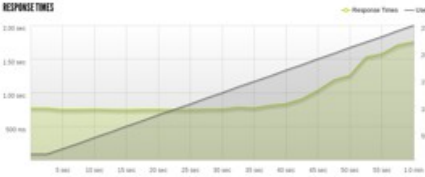


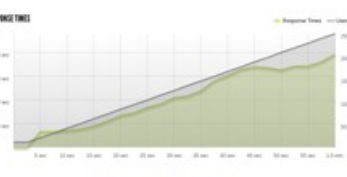
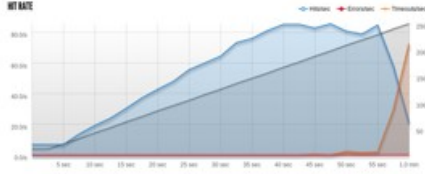


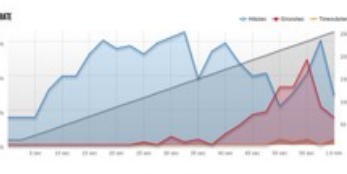


Response Time :

- 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



Odoo

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

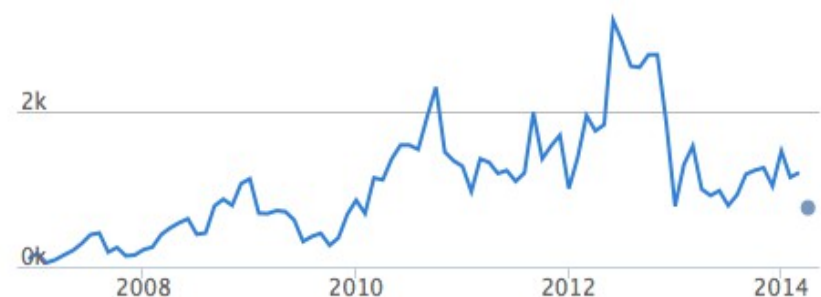
13571 Commits

Down -11979 (46%) from previous 12 months

179 Contributors

Down -87 (32%) from previous 12 months

Commits per Month



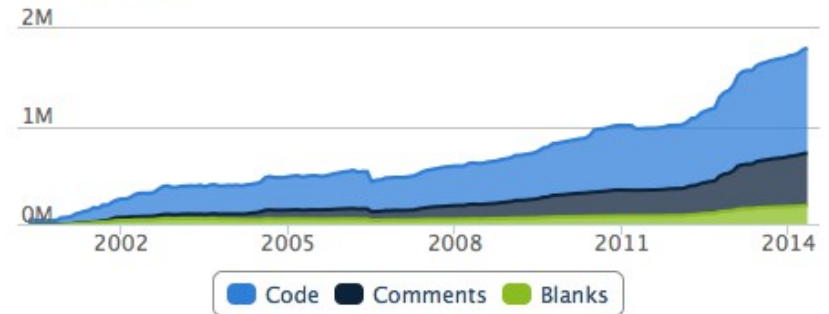
In a Nutshell, Drupal (core)...

- ... 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

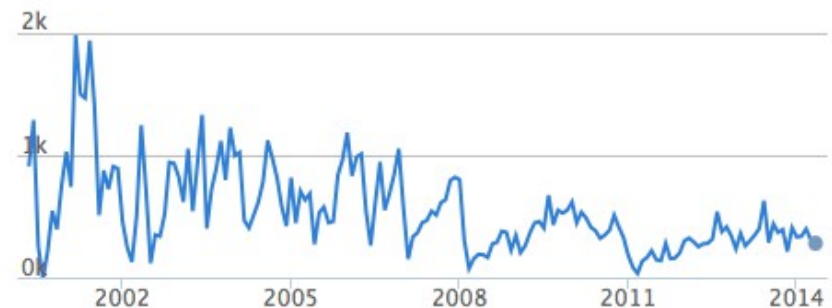
4527 Commits

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

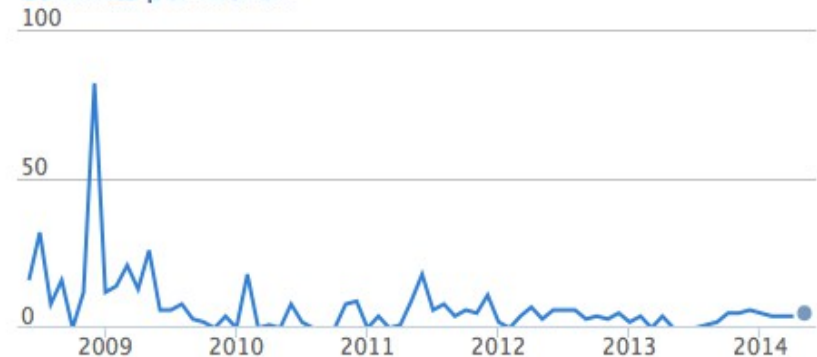
12 Month Summary

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



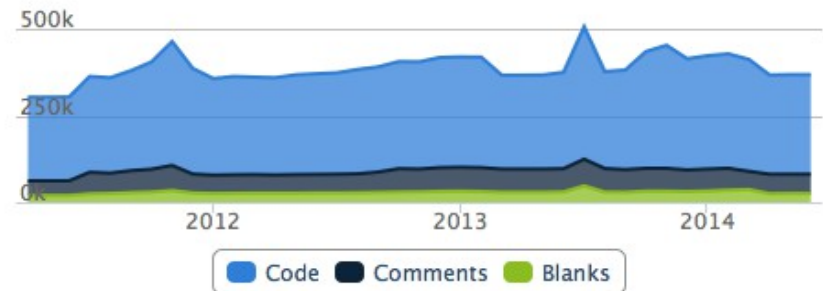
In a Nutshell, PrestaShop...

- ... 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

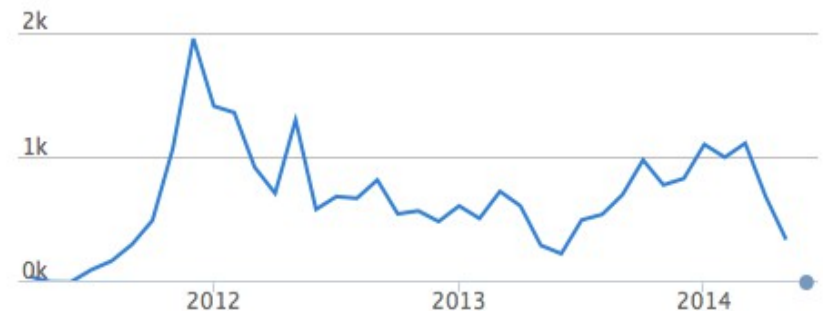
8836 Commits

Up +1689 (23%) from previous 12 months

197 Contributors

Up +106 (116%) from previous 12 months

Commits per Month





Conclusion



Conclusion

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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