

# Google Page Speed Optimizer



## Magento Extension User Guide

**Official extension page:** [Google Page Speed Optimizer](#)



**User Guide:** [Google Page Speed Optimizer](#)

Support: <http://amasty.com/contacts/>

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## 1. JavaScript minification

To configure extension settings please go to **System -> Configuration -> Google PageSpeed Optimizer**

### Google Page Speed Optimizer

Javascript Minification		
Enabled	<input type="text" value="Yes"/>	[STORE VIEW]
Minification Level	<input type="text" value="Remove whitespaces (Recommended)"/>	[STORE VIEW]
Ignore *.min.js Files	<input type="text" value="Yes"/>	[STORE VIEW]

CSS Minification
HTML Minification
Fingerprints
Render-blocking Content
Images Optimization
Debug

Javascript Minification		
Enabled	<input type="text" value="Yes"/>	[STORE VIEW]
Minification Level	<input type="text" value="Remove whitespaces (Recommended)"/> <input type="text" value="Remove whitespaces (Recommended)"/> <input type="text" value="Simple code optimization"/> <input type="text" value="Advanced code optimization"/>	[STORE VIEW]
Ignore *.min.js Files		[STORE VIEW]

The extension uses external [Google Closure Compiler](#) for JS minification. So please make sure external domain can be reached from your server without any restrictions.

There are three JS **Minification Levels** available:

- Remove Whitespaces
  - Simple Code Optimization
  - Advanced Code Optimization
- Please find more details about minification levels [here](#).

With enabled **Ignore \*.min.js Files** option already minified JS files (usually contains *min* in the URL) will be skipped during minification.

**Running [cron](#) job is required for the successful minification!**



## 2. CSS minification settings

Set the option to **Yes** to enable **CSS code minification**. During the minification process all unnecessary characters like new lines, comments and others will be accurately removed without affecting your source code.

### Google Page Speed Optimizer

Javascript Minification	
CSS Minification	
Enabled	<input type="text" value="Yes"/> [STORE VIEW]

```
.product-view .product-options-bottom .price-box,  
.product-view .add-to-cart .qty-wrapper,  
.product-view .add-to-cart-buttons .button,  
.product-view .add-to-cart-buttons .paypal-logo {  
  margin-bottom: 10px;  
}  
.product-view .add-to-cart .qty-wrapper,  
.product-view .add-to-cart .qty-wrapper label {  
  margin-right: 7px;  
  float: left;  
}  
.product-view .add-to-cart .qty-wrapper label {  
  line-height: 40px;  
}  
.product-view .add-to-cart .qty-wrapper .qty {  
  float: left;  
  height: 40px;  
}  
.product-view .add-to-cart-buttons {  
  float: left;  
  margin-right: 10px;  
  max-width: 100%;  
}
```

**BEFORE**

```
.regular-price(padding-right:0;line-height:1.2).pr  
.price(color:#39c;font-size:24px).product-view .pr  
.product-shop .price-box .special-price span.weee  
height:1.2;color:#636363}.product-view .product-sh  
excluding-tax .price,.product-view .product-shop .  
wrapper,.product-view .block-related(width:50%;flc  
tax .label(font-size:15px).product-view .product-s  
to-cart-wrapper(float:none;width:100%;clear:both).  
.price-excluding-tax .price,.product-view .product  
shop .price-box .price-including-tax(margin-bottom  
box(width:50%;float:left).product-img-box .product  
width:475px){.product-img-box .product-image img{m  
gallery .gallery-image.visible.hidden(visibility:f  
gallery:before(background-color:white;opacity:0.8;  
repeat;background-position:center;z-index:3).prod  
block).product-image-thumbs li:first-child(margin-  
.add-to-cart-wrapper,.product-view .block-related{  
bottom:10px}.product-view().product-view .add-to-l  
.add-to-cart .qty-wrapper,.product-view .product-c  
to-cart-buttons .button .product-view .add-to-cart  
.qty-wrapper label(line-height:40px).product-view  
logo{clear:left;text-align:center}.product-view .a  
auto}.product-view .add-to-cart-buttons .paypal-lc
```

**AFTER**



### 3. HTML minification

Works the same way as the CSS Minification. Extra white spaces, comments, and formatting will be cleaned off the **HTML code**.

#### Google Page Speed Optimizer

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Javascript Minification		
CSS Minification		
HTML Minification		
Enabled	<input type="text" value="Yes"/>	[STORE VIEW]



### 3. Fingerprints settings

HTML Minification	
Fingerprints	
Add Timestamp To URLs of All CSS/JS Files	<input type="text" value="Yes"/> [STORE VIEW] <small>▲ Useful with high HTTP cache lifetime values. See <a href="https://developers.google.com/web/fundamentals/performance/optimizing-content-efficiency/http-caching#cache-control">https://developers.google.com/web/fundamentals/performance/optimizing-content-efficiency/http-caching#cache-control</a> for more information.</small>

**Add Timestamp To URLs of All CSS/JS Files** setting adds timestamp to all JS and CSS files to make browser automatically update cached values once they are changed. Useful with high HTTP cache lifetime values. More details [here](#).

```
/skin/frontend/rwd/default/css/styles-ie8.css?v=1475677523 media="all" />  
/skin/frontend/rwd/default/css/madisonisland-ie8.css?v=1475677523" media="all" />
```

```
/skin/frontend/rwd/default/css/styles.css?v=1475677523 media="all" />  
/skin/frontend/rwd/default/css/madisonisland.css?v=1475677523" media="all" />
```



## 4. Render - blocking content settings

### Render-blocking Content

Move Javascript to Footer	Yes	[STORE VIEW]
Ignore List	google-analytics yandex	[STORE VIEW]

▲ Don't Move These Js To Footer

In order to improve the loading time of the page, it is recommended to place JavaScript files at the bottom of the page. Enabling **Move Javascript to Footer** will move all JS scripts to the footer, except scripts from the **Ignore List**. Replaced analytics scripts can stop working, so it's a good idea to put them to the exceptions list.

*The extension can not Optimize CSS Delivery as this can not be done automatically and requires sufficient changes in the code of the theme.*



## 5. Images Optimization

Images Optimization		
Automatically Optimize Product Images	<input type="text" value="Yes"/>	[STORE VIEW]
Command For Jpeg Optimization	<input type="text" value="jpegoptim --all-progressive --strip-xmp --strip-com"/>	[STORE VIEW]
Command For Png Optimization	<input type="text" value="optipng %f"/>	[STORE VIEW]
Command For Gif Optimization	<input type="text" value="gifsicle %f -o %f"/>	[STORE VIEW]

Large images often increase page loading time. The extension allows optimizing images without losing the quality.

**The following tools should be installed on the server:** [jpegoptim](#), [optipng](#) and [gifsicle](#)  
Usually, store owners or admins don't have enough permissions to install software on the server. So it's time to contact hosting company or system administrator.

Enable the **Automatically Optimize Product Images** option to compress on the fly all product images generated by Magento.

**Command For Optimization** settings allow using other tools (for example, *pngquant* instead of *optipng* to convert png24 to png8) or change optimization parameters (*jpegoptim --all-progressive --strip-all* will remove ICC profile and decrease the size of jpg/jpeg files, but it can change the color of the images).





## 5. Images Optimization

Go to **System -> Cache Management** and click the *Flush Catalog Images* button to optimize new images.

To optimize images stored in *skin* and *media* folders you need to **enter your server via ssh**, open Magento root directory and run the command:

```
php -f shell/amoptimization.php -- optimize
```

### Additional Cache Management

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**Flush Catalog Images Cache**

Pregenerated product images files.



**Flush JavaScript/CSS Cache**

Themes JavaScript and CSS files combined to one file.

**Flush Minified JavaScript/CSS**

Minified files created with the "Google Page Speed Optimizer" extension by Amasty.



## 6. FAQ

### How can I check what the rank I will get after the installation?

Unfortunately, there is no clear answer, as there are a lot of circumstances. You can check your site in [PageSpeed Insights](#) tool to find the list of problems on your site and compare it with the [list of the issues](#) our extension can help with.

The issues from the red ***Should Fix*** list affect the rank primarily. So there is no point fixing issues from the yellow ***Consider Fixing*** list before resolving more important red issues.

### Is the extension compatible with default Magento CSS/JS merge?

Yes, the extension is fully compatible with the native Magento JS/CSS merge functionality.

### JS has not been minified. Why?

Please check if the [cron job](#) is running and if there is direct access to the Magento from the internet, as the [external minification tool](#) is used.

Please note, some time for js minification is needed (approximately 1 hour).

### Images are still not optimized.

Please make sure you followed both [product images optimization](#) and [theme images optimization](#) guides.

The issue can be caused as well by using large source images – the image shown on the front end is much smaller than the original file. Resizing of the original images can solve such issues.



### Which problems can be solved by the extension?

The extension can help to solve the following issues (click on the issue to find the solution):

- Minify JavaScript
- Minify CSS
- Minify HTML
- Leverage browser caching
- Eliminate render-blocking JavaScript and CSS in above-the-fold content
- Optimize images

### How to remove the extension?

1. Remove the following files:

*app/etc/modules/Amasty\_Optimization.xml*

*app/code/local/Amasty/Optimization/*

*app/design/adminhtml/default/default/layout/amasty/amoptimization/*

*app/design/adminhtml/default/default/template/amasty/amoptimization/*

*app/locale/en\_US/Amasty\_Optimization.csv*

*shell/amoptimization.php*

2. In the database:


in the *core\_resource* delete the record with the code *amgroupcat\_setup*

drop the table *amasty\_amoptimization\_task*

3. Flush Magento Cache in Admin Panel.



## 7. Optimization results in Google PageSpeed Insights

PageSpeed Insights 

ANALYZE



Mobile



Desktop



Mobile



Desktop

**63 / 100** Suggestions Summary

**! Should Fix:**

Leverage browser caching

↳ [Show how to fix](#)

Eliminate render-blocking JavaScript and CSS in above-the-fold content

↳ [Show how to fix](#)

Enable compression

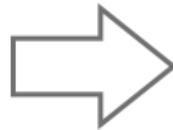
↳ [Show how to fix](#)

Minify JavaScript

↳ [Show how to fix](#)

**✓ 5 Passed Rules**

↳ [Show details](#)



**88 / 100** Suggestions Summary

**! Consider Fixing:**

Eliminate render-blocking JavaScript and CSS in above-the-fold content

↳ [Show how to fix](#)

Leverage browser caching

↳ [Show how to fix](#)

**✓ 8 Passed Rules**

↳ [Show details](#)

Use [Google PageSpeed Insights](#) tool to check out your desktop website performance.



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Support: <http://amasty.com/contacts/>

# Thank you!

Should you have any questions or feature suggestions, please contact us at:

<http://amasty.com/contacts/>

Your feedback is absolutely welcome!



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