

that educational policy would enhance India's economy, scientific and technical sectors. It was widely discussed at the national and state level and in this discussion, the state of Maharashtra also showed its views.

Among the goals that were put forward in the National Education Policy, 1986 –

- To create a cultured personality of the person.
- To preserve the spiritual and moral values of person.
- Creating a scientific outlook
- Creating an attitude of diligence in expressing.
- Crating respects for secularism and nation.

Among with these different approaches, the Commission recommends education for the development of individuals. In view of the purpose of the Commission, it is seen that the person has tried to provide value education. Religious education, Character education and Moral education have used in the past. In the national policy of 1986, the term Value education is used.

Conclusion :

The article presented discusses the historical background of value education. In which Vedic Period, Buddhist Period, Medieval Period, British Period, Various Commissions and Value education etc. have been discussed.

References :

- डॉ. एकनाथ गावंडे, मुल्याधिष्ठित शिक्षण प्रक्रिया आणि उपचार, नुतन प्रकाशन, पुणे.
- Dr. A.S. Altekar (1965)., Education in ancient India.
- Dr. Gawande E.N., Value Oriented Education, Nutan Prakashan, Pune.
- R.N.Sharma., R.K.Sharma, History of Education in India.
- NCERT The concept and Practice of Equality of Educational Opportunity in India, New Delhi, NCERT, 1970.
- Dr. Gururaj Karajagi, Role of Teachers and Parents in imparting Values.
- Various Education Commission in India.
- cbseacademic.nic.in.

Autooptimize: Google Friendly Techniques To Optimize A Website With Aggregate Js, Minify Css, Cache Scripts & Styles

Yash Vidyasagar

Student, M.Sc. I Year, Fergusson College, Pune

R. D. Chaudhari

Assistant Professor, Department of Electronics, Shri R.L.T. College of Science, Akola

ABSTRACT

The Google friendly approach to increasing the ranking of the website is currently the hottest issue being exercised on the net. The techniques of optimizing your site are of course critical. The basic need is to aggregate JS, minify the CSS (no in lining), cache scripts and styles, injects CSS in the page head by default but can also inline critical CSS and defer the aggregated full CSS, moves and defers scripts to the footer and minifies HTML. The best practices are: optimisation of images with lazy-loading, optimizing Google Fonts, asynchronising non-aggregated JavaScript, removing the CMS core emoji crust and many more. We have practically experimented on these techniques and found that the performance of the website, particularly for the search giant Google, is just great. Even when already on HTTP/2! There are many types of utilities, plugins, etc. available on the net, but the best plugin that we found is the Autooptimize. It has extensive API available to enable you to tailor to each and every site's specific needs.

INTRODUCTION

The Autooptimize plugin concatenates all

scripts and styles, minifies and compresses them, adds expired headers, caches them, and moves styles to the page head, and serves (optionally) to the footer. It also minifies the HTML code itself, making your page really lightweight.

Aggregate all linked JS files to have them loaded for non-render blocking. Also the individual JS files will remain in place but will be minified. Autoptimize also extracts JS from the HTML.

The website running with Autoptimize, becomes significantly faster by just ticking a couple of checkboxes to optimize and lazy load your images. The WebP support is already included. It optimizes images on the fly and serve them from ShortPixel's global CDN to get more Google love and improve the website's loading speed by having the publicly available images optimized on the fly (also in the "next-gen" WebP image format) by ShortPixel and then fetched and served fast from ShortPixel's global CDN.

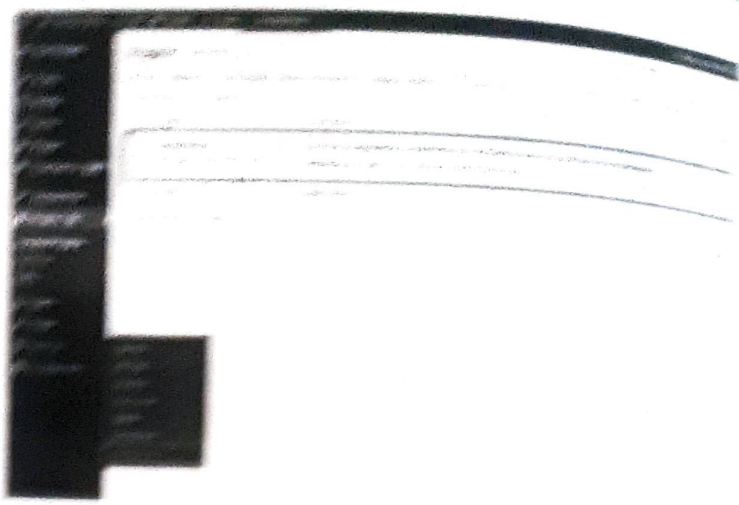
HOW TO INSTALL IT?

1. Installing Autoptimize is simple! First log into the WordPress administration section, as shown below.
2. Then use the left hand navigation to select Plugins - Add New.
3. In the Search field on the upper right corner, type "Autoptimize". The Autoptimize will be the first result listed. Click on the Install Now button.
4. Once the plugin has finished installing, click the Activate button.
5. After activation, visit the setting page of the plugin.

CONFIGURATION TECHNIQUES OF AUTOPTIMIZE

When the plugin is activated, you will see a couple of additions to WordPress. There will be a new Autoptimize menu item on the top of the screen. You can click on the title of the menu to go to the Autoptimize settings page. You can also get to the Autoptimize settings

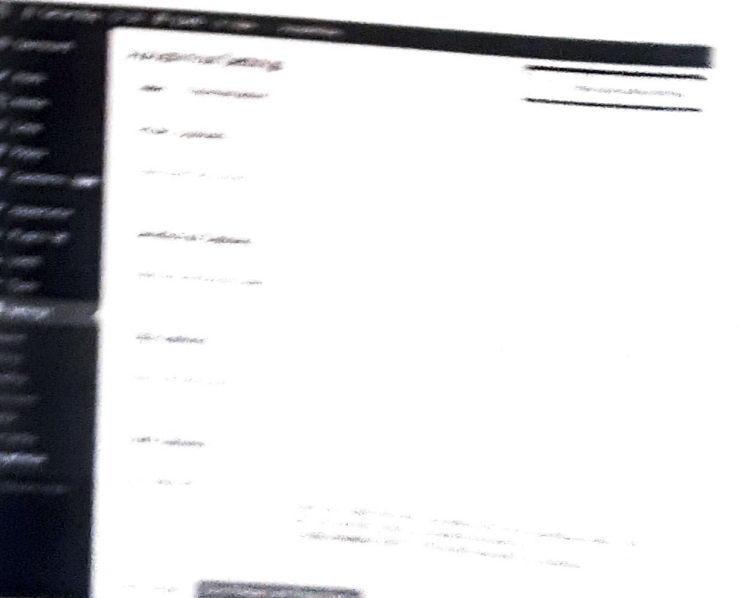
page by using the Settings/Autoptimize menu item at the top of the screen.



After you reach the Autoptimize settings page, you will be surprised to see that how simple it looks. There are two ways to use it.

Basic settings mode: You simply tick the box of the options you want to use. You can also tick to optimize your site's HTML, JavaScript and CSS. You can also add details of your content delivery network.

Advanced settings mode: You will also be shown additional settings for each option. Let's click Show Advanced Settings and jump over the page end!



HTML OPTIONS

This HTML options section only has two items to choose from. Optimizing HTML by checking the box to optimize HTML, and the HTML, removing white

unnecessary characters. Similarly, you can keep HTML comments.

JAVASCRIPT OPTIONS

The JavaScript options are somewhat complex to customise.

1. Optimise JavaScript code: Enable or disable Autooptimize for JavaScript.

2. Force JavaScript in: If you have some issues with JavaScript components failing to work correctly, try this option. It will load the JavaScript early on, which can resolve common problems with page rendering.

3. Also aggregate inline JS: Some WordPress themes have inline JavaScript which is located throughout HTML files. You can pull this JavaScript out and combine it into a single file, which improves page speed. Use this option with caution, because it can cause the Autooptimize cache to become large very quickly.

4. Exclude scripts from Autooptimize: You may encounter a script that does not work correctly after Autooptimize has minified or aggregated it. If you have a malfunctioning script exclude it from Autooptimize here.

5. Add try-catch wrapping: If a JS error is preventing your pages from working correctly, check this option. It will "catch" any errors before they can stop the page rendering.

CSS OPTIONS

1. Optimise CSS Code: Enable or disable Autooptimize for CSS.

2. Generate data: URIs for images: This option lets you encode small images into your CSS files instead of having more server calls to download individual images.

3. Remove Google fonts: If you don't use Google fonts in your theme, uncheck this box.

4. Also aggregate inline CSS: The option removes CSS from your HTML and aggregates it. Useful if your theme has CSS throughout many pages.

5. Inline and Defer CSS: This option allows you to put some CSS in the HTML file if it is required to load the page. Other CSS is deferred and loaded afterwards.

6. Inline all CSS: This option can work well for low traffic websites.

7. Exclude CSS from Autooptimize: A list of CSS files Autooptimize shouldn't touch.

ADVANTAGES OF USING AUTOOPTIMIZE PLUGIN

Website owners spend a lot of time creating content, developing marketing strategies, and working on their website's design. Unfortunately, the technical aspects are generally ignored like the speed of their website. The page loading speed is important because of the following reasons:

Fast Websites Have Better Search Engine Rankings: Now-a-days, most of the search engines use page load speed as an important ranking factor. If the pages load very quickly, the website will receive a boost to your search engine rankings. If your pages load slowly, you may drop some entries, in search engine results. If you can improve the speed of your website, your rank will improve and your website's traffic could dramatically increase.

Visitors Prefer Fast Websites: Many web developers do not customise the coding properly, when it comes to the performance of the websites. The visitors always expect websites to load quickly and to be responsive to their requests on different media like mobile phone screen, PC, iTab, iPod, etc.

If the page takes more than 3 seconds to load, your website is surely losing up to 40% of your visitors. This means that the website has a very high bounce rate, which refers to the number of visitors who navigated away from the site after viewing one page.

Visitors are also less likely to trust a slow-loading site because they often believe it indicates a lack of professionalism. If you are selling a product or service, this can lead to a drop in conversions and the profits, in turn!

Finally, if you are providing a service (for example, the service of education) via your website, speed is crucial for maintaining the quality of that service. If visitors have to wait

10 seconds for each page to load, they will quickly become frustrated.

As said earlier, the plugin concatenates all scripts and styles, minifies and compresses them, adds expires headers, caches them, and moves styles to the page head, and scripts (optionally) to the footer. It also minifies the HTML code itself, making the web page really lightweight.

HTTP/2 reduces the impact of multiple requests from the same server significantly by using the same connection to perform several concurrent requests. So the concatenation of CSS/ JS can still make a lot of sense. So it means that the step which required to follow, are very simple: configure, test, reconfigure, retest, tweak and look what works best in your context. Maybe it's just HTTP/2, maybe it's HTTP/2 + aggregation and minification, maybe it's HTTP/2 + minification (which AO can do as well, simply untick the "aggregate JS-files" and/ or "aggregate CSS-files" options). And Autoptimize can do a lot more then just optimizing your JS & CSS of course.

Starting from AO 2.1 WordPress core's jquery.js is not optimized for the simple reason a lot of popular plugins inject inline JS that is not aggregated either (due to possible cache size issues with unique code in inline JS) which relies on jquery being available, so excluding jquery.js ensures that most sites will work out of the box. If you want optimize jquery as well, you can remove it from the JS optimization exclusion-list (you might have to enable "also aggregate inline JS" as well or switch to "force JS in head").

THE ISSUE OF CACHE

The Autoptimize cache is a very simple file cache. By default, files that are combined and minified are stored in the /wp-content/cache/Autoptimize folder. You can empty this cache whenever you please by clicking the Delete Cache button highlighted in the image below.



IN A NUTSHELL

Autoptimize is designed to simplify the process of optimizing a WordPress site. Its capabilities are quite extensive.

Aggregation of files: Autoptimize can file loads to be faster than concatenating 20 files. Aggregation concatenates your CSS and JavaScript files, so the user's browser only needs files to download.

Minification of files: Autoptimize removes unnecessary characters and white space from files. This results in files that are much smaller in size and quicker to download. Autoptimize can minify HTML, CSS, and JS files.

Caching of files: Autoptimize can cache HTML files, scripts and CSS files, so subsequent files are ready to be served to users. This reduces server load and increases speed. Autoptimize also works well with other more advanced caching plugins like W3 Total Cache, Comet Cache and Hyper Cache.

Defers scripts to the footer: Autoptimize up the loading of your website, the plugin takes some scripts to the footer of the page. This allows the user to begin using the content page while some scripts continue loading in the background.

Content Delivery Network (CDN) integration: A CDN is a third party service that stores some of your content. Autoptimize makes it easy to integrate CDN files.

REFERENCES

- Dmytro Spilka, *Speed Up Your WordPress Site*, 2017, the optimisation techniques of Autoptimize plugin.
- WP VILLA, *WordPress.com* 2018, how to configure Autoptimize for getting better performance.