



Brzina učitavanja web stranica

WEB dizajn 28.04.2020



- Jedan od najvažnijih elementa rangiranja
- Napuštanje stranice od strane korisnika pre nego što se otvori, Google uzima kao negativan signal prilikom njenog rangiranja

Why visitors are leaving your website



ČINJENICE

- 47% korisnika interneta očekuje da se veb stranica učita za 2 sekunde ili manje.
- 40% posetilaca napušta stranicu ako se otvara 3 (tri) ili više sekundi.
- 79% klijenata je reklo da se neće vratiti na sajt sa lošim performansama
- 52% njih je reklo da je brzo učitavanje stranica važno za njihovu lojalnost sajtu,
- 44% prenosi svoja loša iskustva sa nekim sajtom.



ČINJENICE

- ✓ Pretraživači interneta ne žele da usmeravaju korisnike na sajtove koji ne funkcionišu dobro na mobilnim uređajima!
- ✓ Brzina rada sajta je važna od kraja 2017. godine kada je Google uveo rangiranje prema kvalitetu *mobilnih verzija stranica*.
- ✓ UX je važan SEO faktor, - iskustvu *mobilnih korisnika*.
- ✓ Google rezultate pretraživanja prilagodi upravo potrebama *mobilnih korisnika* njegovih usluga!



KAKO UBRZATI WEB SAJT

- ✓ Provera ključnih performansi web sajta
- ✓ [Google PageSpeed Insights](#)
- ✓ [Pingdom Website Speedtest Tools](#)
- ✓ [GTMetrix](#)
- ✓ [WebPageTest](#)
- ✓ [Google Lighthouse](#)



video

fotografije

hosting

Tema sajta!!!

resusuri

interakcija

????????????



HTTP ZAHTEVI

- Manje zahteva prema serveru, brže učitavanje
- Yahoo
 - „80% vremena za učitavanje veb stranice sajta, troši se na preuzimanje slika, stilova i skripti.“*
- *Chrome / inspect/network*



Smanjenje i kombinacija datoteka

Basic Static Files **CDN** Advanced Database Preload Varnish Tools

Minify files:

! Deactivate if you notice any visually broken items on your website.

- HTML
- CSS
- JS

! Reduces file size, can improve loading time.

i Removes spaces and comments from static files, enables browsers and search engines to faster process HTML, CSS, and JavaScript files.

Combine files:

- Google Fonts
- CSS
 - Combine all CSS files into as few files as possible (test thoroughly!)
- JS
 - Combine all JavaScript files into as few files as possible (test thoroughly!)

! Reduces the number of HTTP requests, can improve loading time.

i Files get concatenated into small groups in order to ensure theme/plugin compatibility and better performance. Forcing concatenation into 1 file is not recommended, because browsers are faster downloading up to 6 smaller files in parallel than 1-2 large files.

Podešavanje CSS i JS fajlova u WordPress-u
pomoću dodatka WP Rocket



- HTML, CSS i JavaScript određuju izgled sajta, ali i povećavaju broj zahteva koje sajt postavlja svaki put kada ga korisnik poseti.
- JQuery i JavaScript se izvršavaju na računaru korisnika i oduzimaju mu brzinu i memoriju.
- Uklanjanje nepotrebnog formatiranja, razmaka i suvišne kôdove.
- Spajanja CSS i JavaScript fajlova, u jednu celinu da olakšate njihovo učitavanje.



Optimizacija isporuke CSS-a fajlova

Podsetnik!!!!

- CSS sadrži zahteve za stilove na web stranicama i smeštaju se na dva mesta:
 - U spolju datoteku koja se učitava pre prikaza stranice,
 - inline, u samom HTML dokumentu web stranice.

Loše rešenje : `<h2 style="background-color: lightblue;">HTML i CSS</h2>`

Dobro rešenje : `<h2>HTML bez CSS-a</h2>`,

CSS stilovi su smešteni u posebnu datoteku.





seo speed performance mobile tools

Labthink   **Coefficient Of Friction Tester**
• Static and kinetic COF Test
• Professional Software, Customization Available [View More](#)

CSS delivery tool

This tool displays how CSS is used on a page. Examines the external and internal use of CSS.

by [Patrick Sexton](#)

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ASINHRONO UČITAVANJE CSS I JAVASCRIPT DATOTEKE

- CSS i JavaScript mogu se učitavati *sinhrono* ili *asinhrono*.
- Sinhrono učitavanje - *po* redosledu kojim se pojavljuju na web stranici.
- *Asinhrono* učitavanja skripti, istovremeno



MINIMIZIRANJE VREMENA DO PRVOG BAJTA

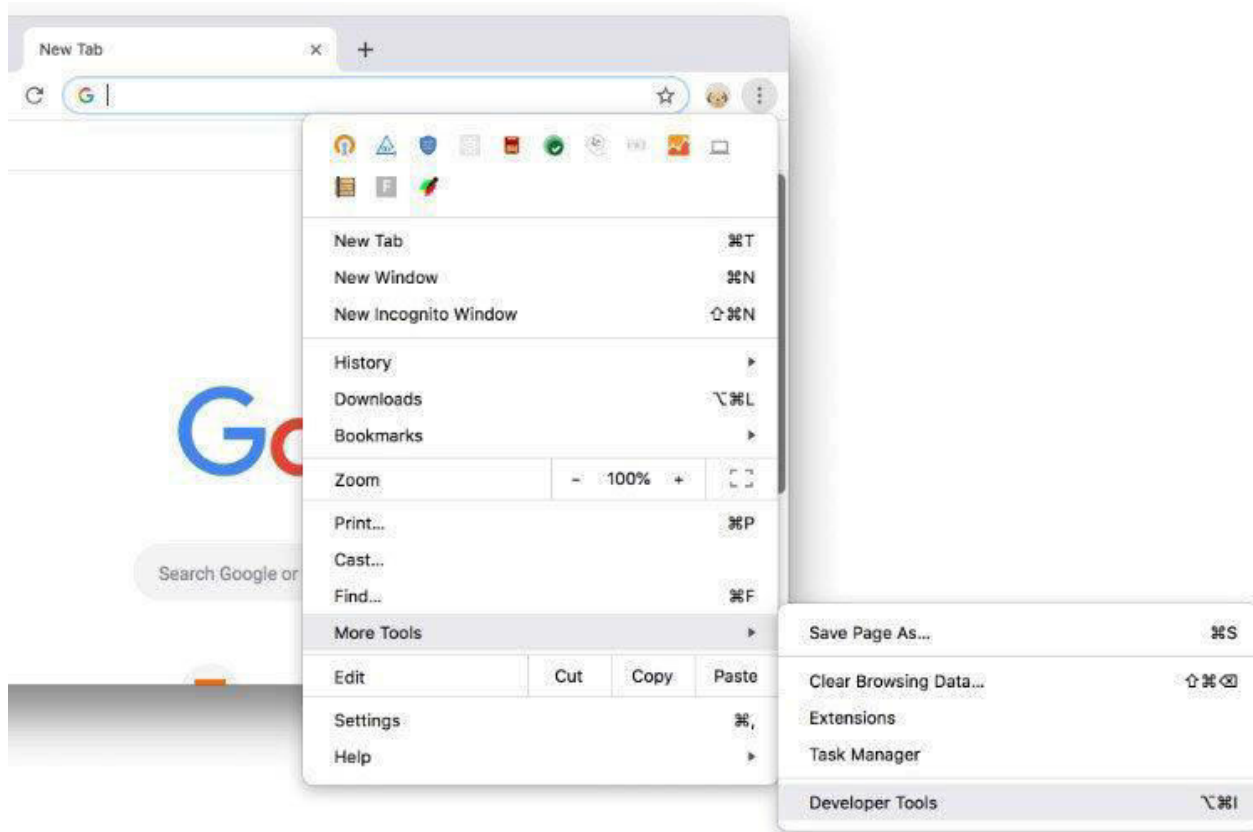
- **TTFB** – vreme do prvog bajta, je vreme koje pretraživač sačeka da dobije prvi bajt podataka sa servera.
- Google preporučuje da TTFB bude manji od 200 ms.
- Većina sporih TTFB je uzrokovana problemima
 - sa mrežom,
 - dinamičkim sadržajem,
 - konfiguracijom veb servera i saobraćajem.



- Kada korisnik poseti vaš sajt, njegov pretraživač šalje HTTP zahtev serveru koji hostuje sajt. Postoje tri koraka između početnog zahteva i prvog bajta podataka:
 1. DNS lookup.
 2. Obrada servera (Server processing).
 3. Odgovor (Response).



ALATI





The fastest growing CDN in Brazil



Test a website's performance

- Advanced Testing**
- Simple Testing
- Visual Comparison
- Traceroute

Enter a Website URL

START TEST

Test Location: Dulles, VA USA (Desktop, Android, iOS) | Select from Map

Browser: Chrome

Advanced Settings ▶
3 runs, First View only, Cable connection

Run a free website speed test from multiple locations around the globe using real browsers (IE and Chrome) and at real consumer connection speeds. You can run simple tests or perform advanced testing including multi-step transactions, video capture, content blocking and much more. Your results will provide rich diagnostic information including resource loading waterfall charts, Page Speed optimization checks and suggestions for improvements.

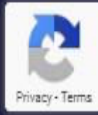
If you have any performance/optimization questions you should visit the [Forums](#) where industry experts regularly discuss Web Performance Optimization.

Recent Industry Blog Posts

- Cloudflare architecture and how BPF eats the world
- Join Cloudflare & Yandex at our Moscow meetup! Присоединяйтесь к митингу в Москве

Recent Discussions

- Explaining site load time improvements
- Invalid API Key for an agent setup in Digital Ocean



PRAVILAN IZBOR HOSTINGA

- **Izbor hostinga** ima imate tri opcije:
 - Deljeni hosting
 - VPS hosting
 - Namenski hosting server

Deljeni hosting

deli se CPU,
prostor na disku i
RAM sa drugim
sajtovima.

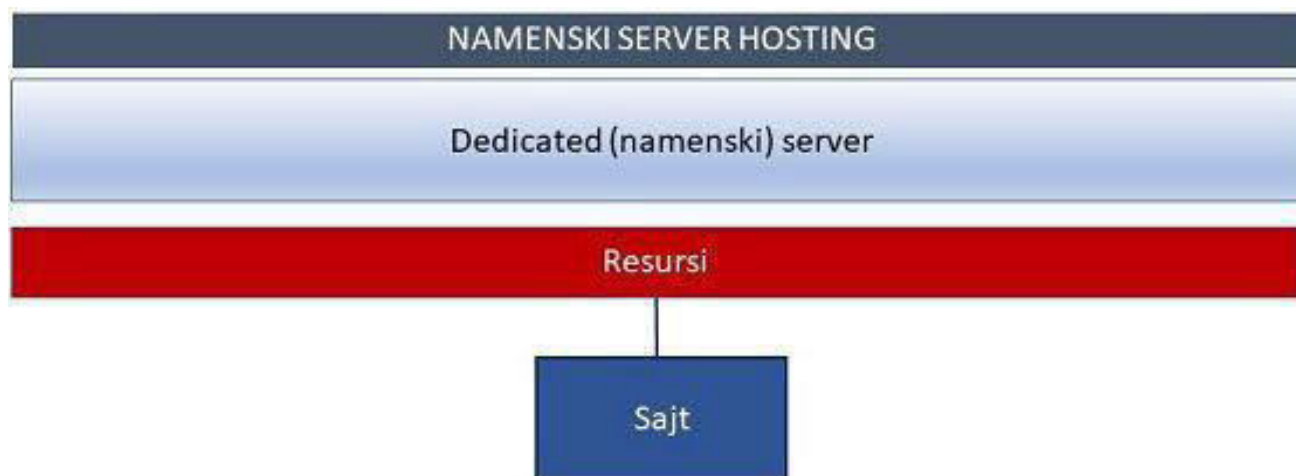
VPS hosting

Deli se server sa
drugim sajtovima, ali
poseduju se i
sopstveni delovi
resursa servera

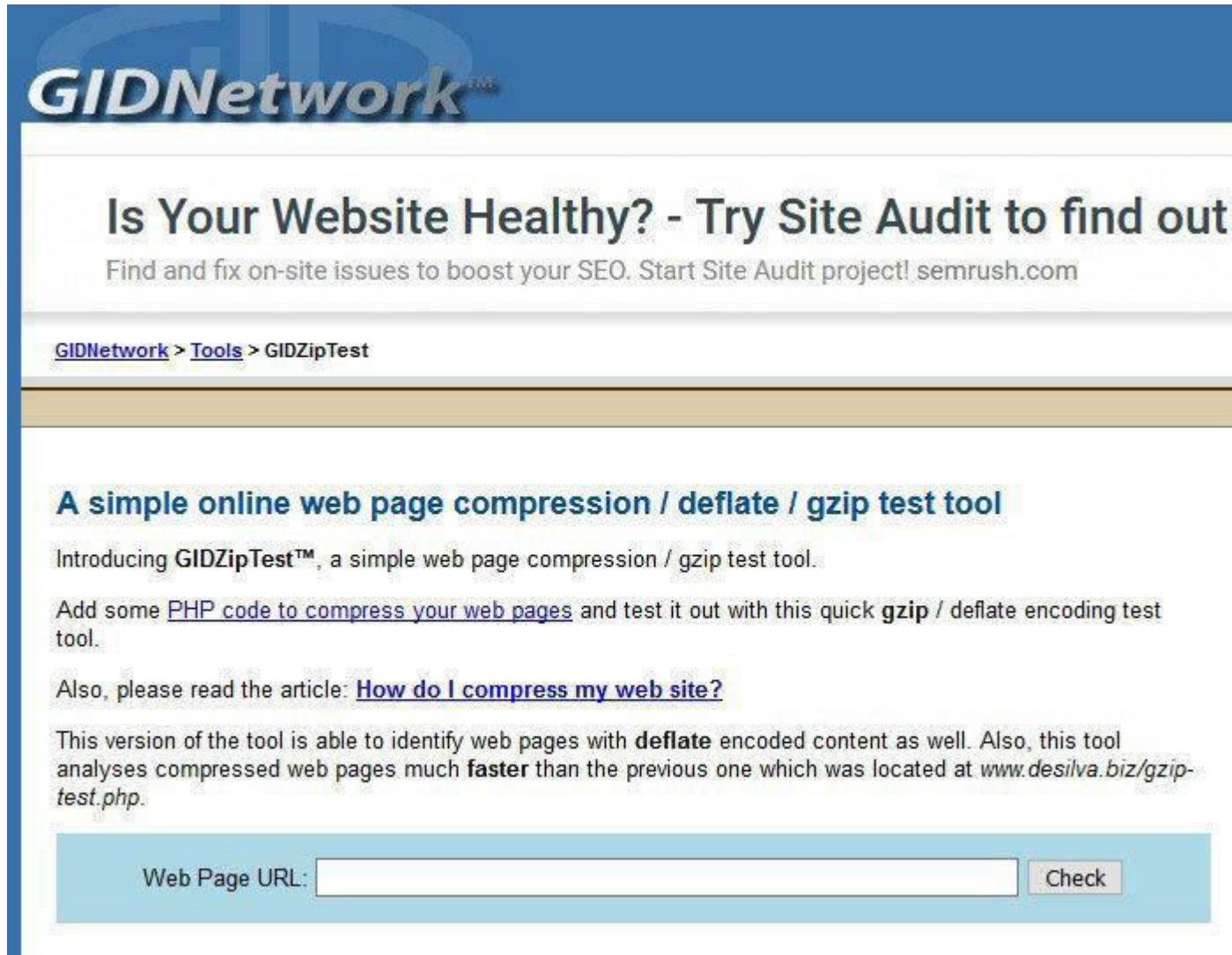
Namenski hosting

ne dele se resursi ni sa
kim,
Održavanje
konfiguracija i
podešavanje.





- Kompresija dokumeneta gzip.



GIDNetwork™

Is Your Website Healthy? - Try Site Audit to find out

Find and fix on-site issues to boost your SEO. Start Site Audit project! semrush.com

[GIDNetwork](#) > [Tools](#) > [GIDZipTest](#)

A simple online web page compression / deflate / gzip test tool

Introducing **GIDZipTest™**, a simple web page compression / gzip test tool.

Add some [PHP code to compress your web pages](#) and test it out with this quick **gzip** / deflate encoding test tool.

Also, please read the article: [How do I compress my web site?](#)

This version of the tool is able to identify web pages with **deflate** encoded content as well. Also, this tool analyses compressed web pages much **faster** than the previous one which was located at www.desilva.biz/gzip-test.php.

Web Page URL:



VELIČINA SLIKA

- 66% online želi da na sajtu vidi najmanje tri fotografije proizvoda pre odluke o kupovini!!
- Preko 40% sadržaja web stranica čine slike i fotografije.
- **Optimalna veličina do 150kb.**
- Optimizacija slika!!!!



OPTIMIZACIJA SLIKA

- **Optimizacija slika za web** je proces pripreme slika za pretraživače (SEO) i njihovu svrsishodnost na internetu.
- *Postupak optimizacije slika za web* sastoji se od:
 - podešavanja veličine i rezolucije slike
 - dodavanja teksta u naziv i opis
 - kreiranja alternativnog imena slike (*alt tag*).





Drop your .png or .jpg files here!

Up to 20 images, max 5 MB each.

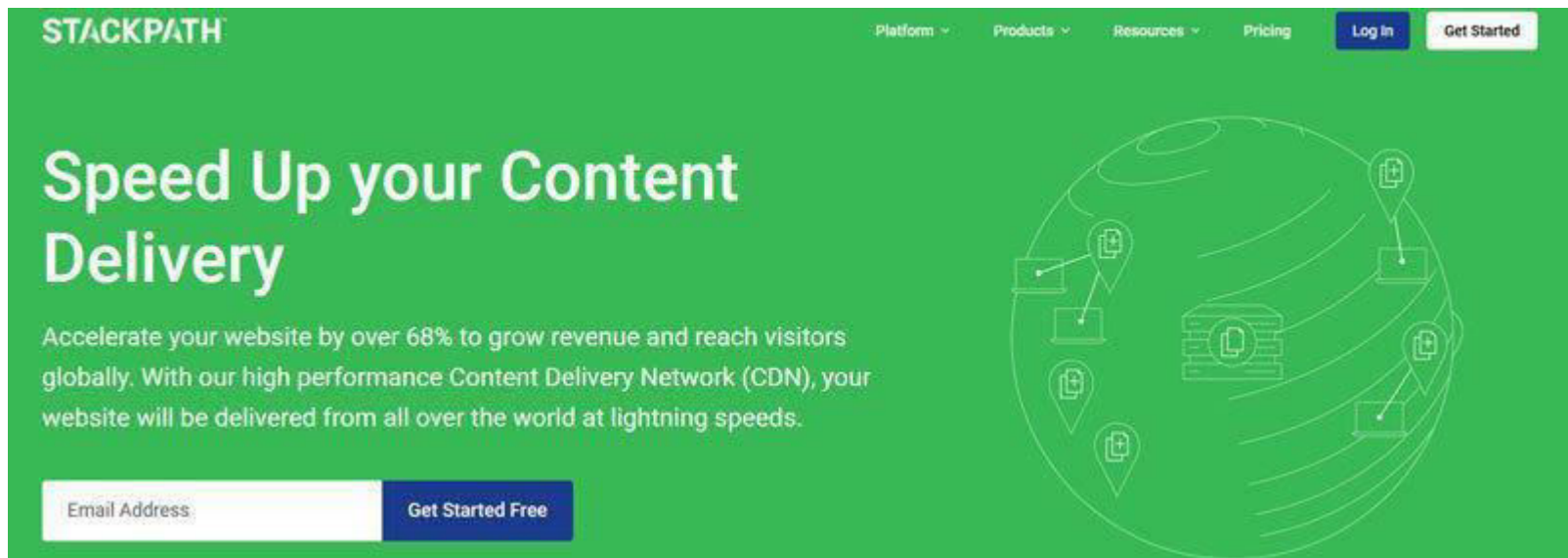
tiny png

Smart PNG and JPEG compression

Optimize your images with a perfect balance in quality and file size.



CDN (CONTENT DELIVERY NETWORK)



The screenshot shows the StackPath website landing page. The background is a solid green color. At the top left, the logo 'STACKPATH' is displayed in white. To the right of the logo, there are navigation links: 'Platform', 'Products', 'Resources', and 'Pricing', each with a small downward arrow. Further right are two buttons: a blue 'Log In' button and a white 'Get Started' button with a blue border. The main heading 'Speed Up your Content Delivery' is written in large, white, sans-serif font. Below the heading, a paragraph of white text reads: 'Accelerate your website by over 68% to grow revenue and reach visitors globally. With our high performance Content Delivery Network (CDN), your website will be delivered from all over the world at lightning speeds.' On the right side of the page, there is a white line-art illustration of a globe. The globe is surrounded by several location pin icons, each containing a document icon, representing global content delivery points. At the bottom left, there is a white input field for an 'Email Address' and a blue 'Get Started Free' button.

STACKPATH

Platform Products Resources Pricing Log In Get Started

Speed Up your Content Delivery

Accelerate your website by over 68% to grow revenue and reach visitors globally. With our high performance Content Delivery Network (CDN), your website will be delivered from all over the world at lightning speeds.

Email Address Get Started Free



KEŠIRNJE PREGLEDAČA

- U slučaju dinamičkih sajtova svaka promena teksta i slika zahteva da se keš izbriše, kako bi posetioци sajta videli najsvežiji sadržaj sajta koji pregledaju.
- 60% posetilaca sajta dolazi sa praznim kešom!
- Kvalitetni *dodaci za keširanje* imaju dosta podešavanja – problem konfiguracija

