

JULY 13, 2024 11:00 A.M.

# Mastering Web Performance

A Guide for WordPress Site Owners

### WORDCAMP CANADA #WCEH



# **About Me**

# **Building with WordPress since v2.1 (2007)**

Originally from Montreal and now in Vancouver, I have worked on hundreds (thousands?) of WP sites, worked at Automattic, at several popular plugin companies, as an agency owner, and this year, I joined Metorik.

Performance, like Security, is at the core of everything I build; it's never an after-thought but rather a priority consideration at all times.



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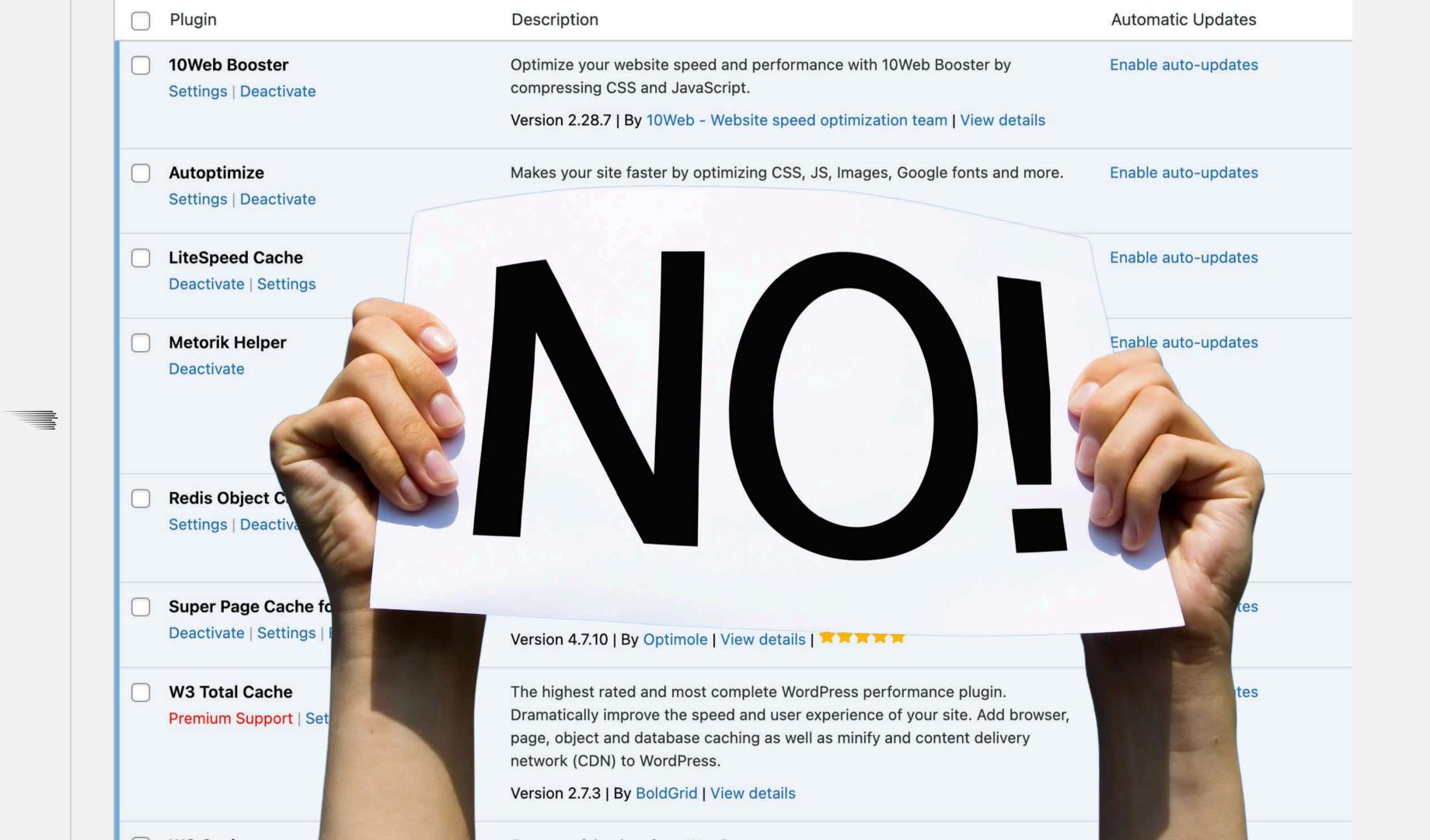




Plugin	Description
10Web Booster Settings   Deactivate	Optimize your website speed and performance with 10Web compressing CSS and JavaScript. Version 2.28.7   By 10Web - Website speed optimization tea
Autoptimize Settings   Deactivate	Makes your site faster by optimizing CSS, JS, Images, Goog Version 3.1.11   By Frank Goossens (futtta)   View details
LiteSpeed Cache Deactivate   Settings	High-performance page caching and site optimization from Version 6.2.0.1   By LiteSpeed Technologies   View details
Metorik Helper Deactivate	Reports, integrations, automatic emails, and cart tracking for stores. Version 2.0.0-beta-1   By Metorik   View details Requires: WooCommerce
Redis Object Cache Settings   Deactivate	A persistent object cache backend powered by Redis. Supp PhpRedis, Relay, replication, sentinels, clustering and WP-C Version 2.5.2   By Till Krüss   View details   🖈 Upgrade to P
Super Page Cache for Cloudflare Deactivate   Settings   Rollback to v4.7.9	Speed up your website by enabling page caching on a Clou Version 4.7.10   By Optimole   View details   ★★★★★
W3 Total Cache Premium Support   Settings   Deactivate	The highest rated and most complete WordPress performa Dramatically improve the speed and user experience of you page, object and database caching as well as minify and co network (CDN) to WordPress. Version 2.7.3   By BoldGrid   View details

Automatic Upo	lates
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eb Booster by	Enable auto-updates
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ogle fonts and more.	Enable auto-updates
om LiteSpeed	Enable auto-updates
for WooCommerce	Enable auto-updates
pports Predis, -CLI. Pro	Enable auto-updates
oudflare free plans.	Enable auto-updates
nance plugin. our site. Add browser, content delivery	Enable auto-updates



# Some common misconceptions

### 01

Performance is only about how fast a page loads. **Perceived Performance** includes various factors like

responsiveness, stability, and the time it takes for a page to become interactive. "Perceived Performance"

02

**Performance only matters for high-traffic sites** All sites benefit from good performance, regardless of traffic levels. Even small improvements can lead to better user experiences and higher SEO rankings.

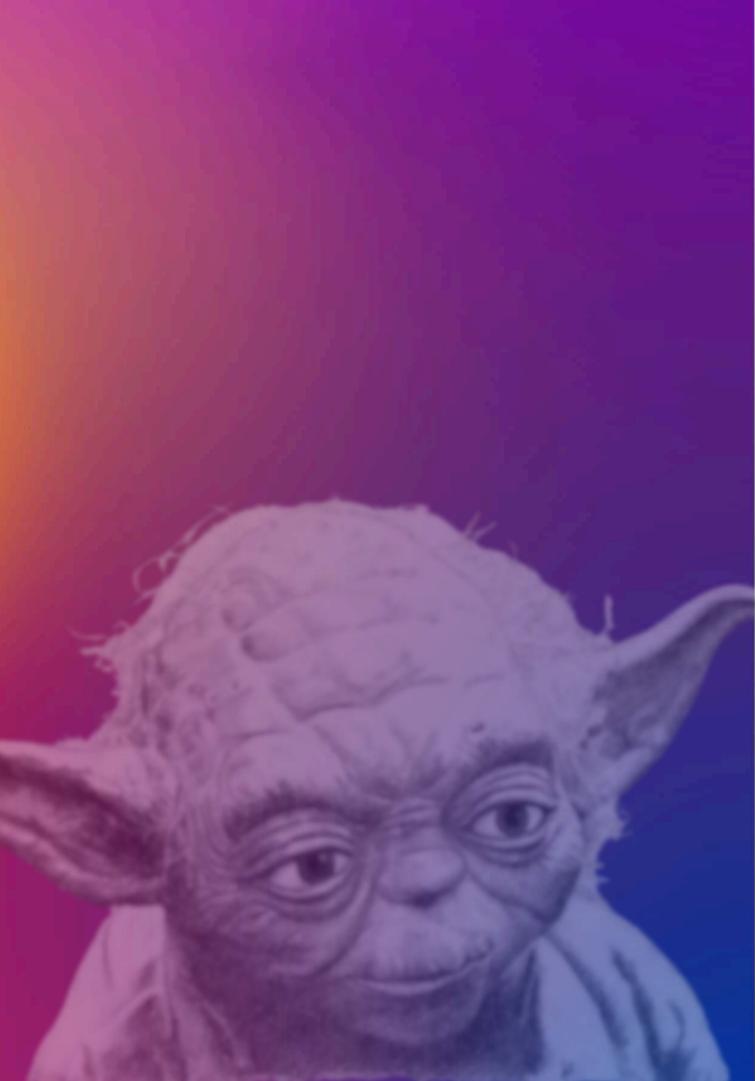
03

Plugins can certainly be a part of the solution but web performance is a broader discipline involving server setup, content optimization, and more. It's about a holistic **approach** to website efficiency.

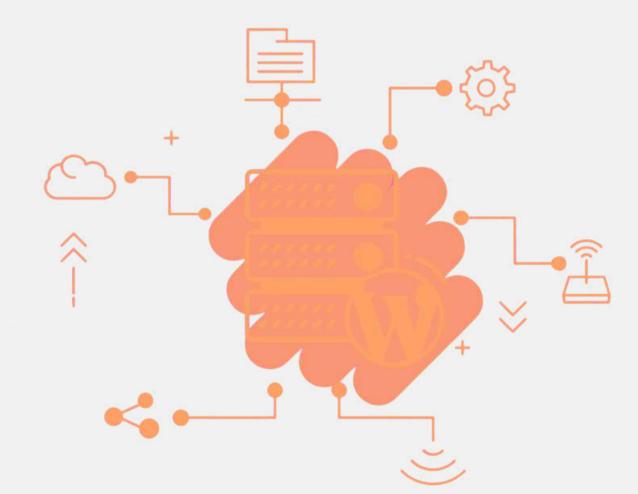
### Web performance is just about using the right plugins

# With WordPress, in control, you are

With great power, comes great responsibility



# **Choose the** right hosting



### 01

**Consider the right type of hosting** Shared, VPS, Dedicated, Managed. So many options out there

02

**Consider datacenter location** Where are your site visitors primarily from? Choose somewhere close, or better yet, somewhere

distributed.

03

**Consider what options the host includes** Built-in performance optimizations, caching, CDN, DDOS protections, Cloudflare or Fastly integration, etc.

# **Choose your** theme wisely



### 01

**Reviews and Reputation matter** Looks for themes that are **well reviewed** by the community, have the **backing** of some well-renowned developers or are vetted by the WordPress theme team

02

You don't need the kitchen sink Does the theme try to please everyone? Does it have a setting for everything? This could be a sign it's trying to do too much. There's exceptions of course....

03

Understand what's inside and what's possible Not every theme is built the same. Take the time to understand what your theme is capable of, what it can do, and how it was put together.

# **Choose your** plugins wisely



**Reviews and Reputation matter** 

Looks for plugins that are **well reviewed** by the community, or are authored by **well-renowned** developers

02

### **Utility Matters**

other things?

03

# Do you really need a plugin for that?

host?

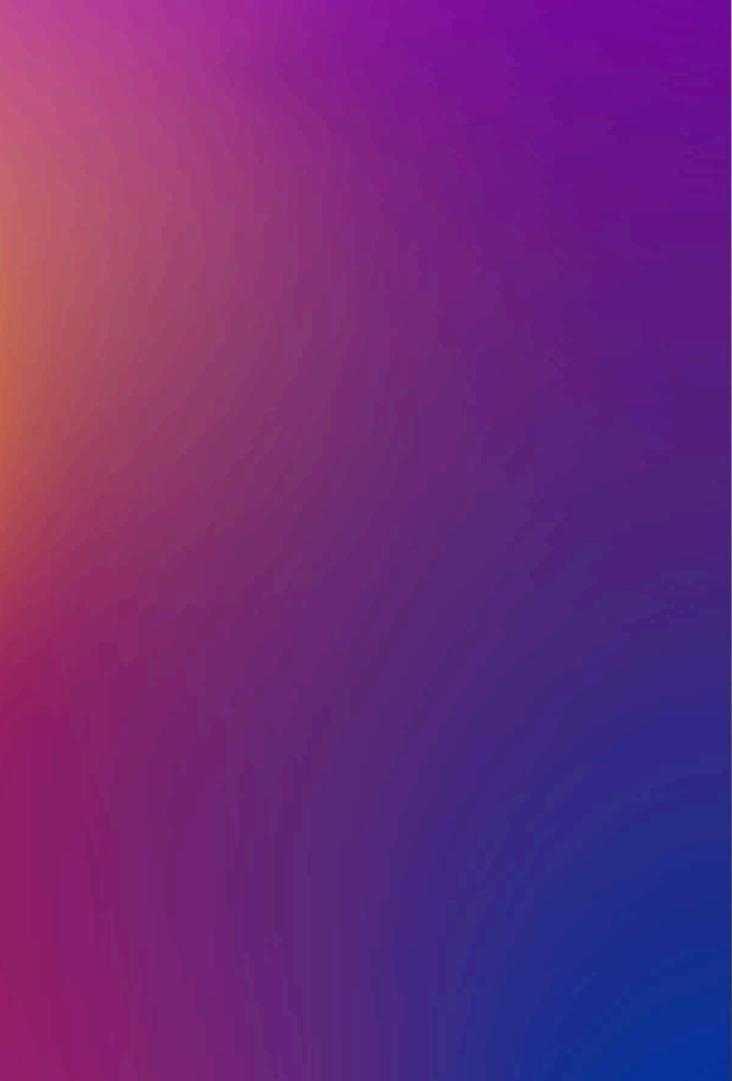
04

Audit your plugin usage Measure performance before/after. Deactivate & delete poor performers or unused functionality.

Does the plugin do exactly what you need or does it do 50

Can you add a code snippet instead? Can you lean on your

# OK, let's get technical (a little)



# Performance Measurement

Always establish a baseline



# Google Lighthouse





# new relic.



**Definition:** The time it takes for a user's browser to receive the first byte of data from the server.

**Example:** A lower TTFB indicates a faster response from the server, improving the overall load time of the website.

Analogy: TTFB is like the time it takes for a restaurant to acknowledge your order before they start cooking.



**Definition:** The time it takes for the first piece of content to be rendered on the screen, such as text or an image.

**Example:** A fast FCP means users see something happening quickly, reducing the **perceived load time**.

Analogy: FCP is like the first time you see food being brought out of the kitchen at a restaurant; it reassures you that your meal is on its way



**Definition:** The time it takes for the largest piece of content visible within the viewport to be loaded.

**Example:** Typically, this could be a large image or a block of text. Faster LCP improves user experience by quickly showing the main content.

Analogy: LCP is like when your main course arrives at your table, and you can finally start eating.

# Your content can have an impact on performance



# Images

You want to serve beautiful images, in a performance conscious way. This can affect your LCP

# **O1 – Choose the right format**

- JPEG: Best for photographs and images with many colors.
- **PNG**: Ideal for images with transparent backgrounds or limited colors.
- WebP: Modern format that provides superior compression for images on the web.
- **SVG**: Best for vector graphics, scalable without losing quality.

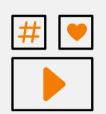
## **02 – Optimize your images**

- **Compress your images -** ideally outside of WP but you can also do this in WP with a plugin
- Make your images responsive https://developer.wordpress.org/apis/responsive-images/
- Use Lazy Loading when appropriate no plugin needed!
  <img src="image.jpg" loading="lazy" ... />



# **External Requests**

May affect your FCP and LCP







Each external request (e.g., for scripts, stylesheets, images) adds latency, increasing the overall load time

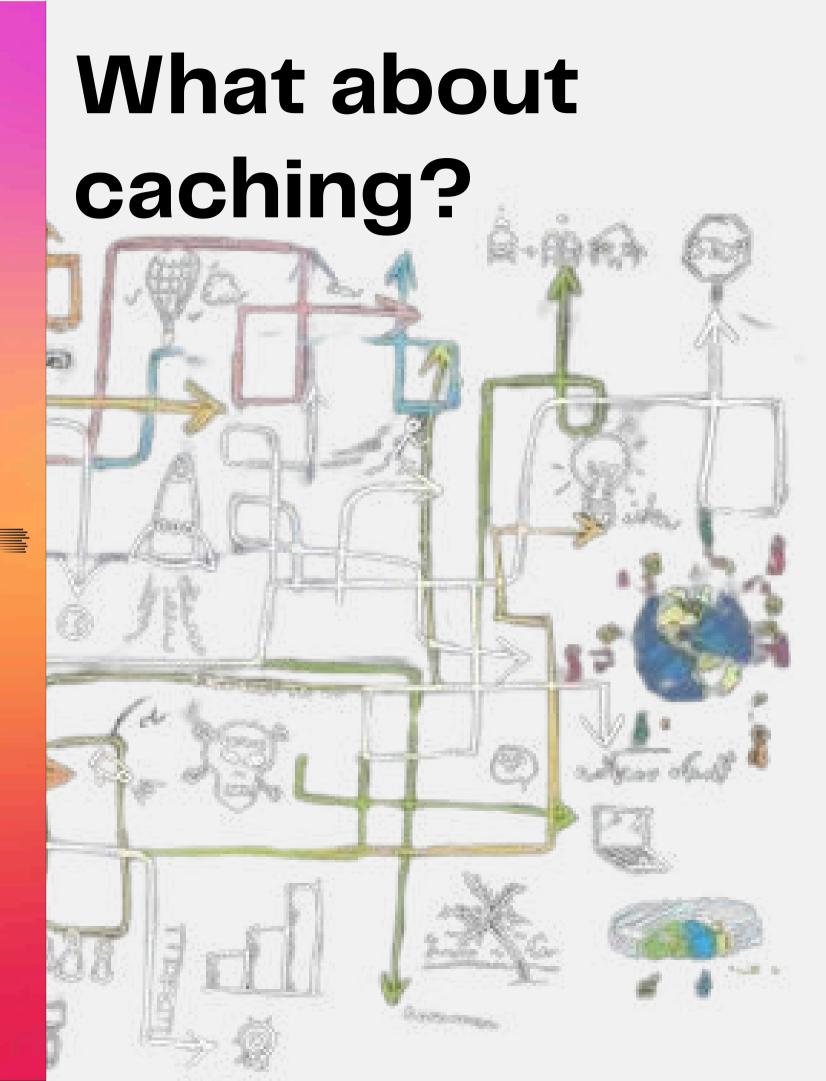
Embed videos, avoid social media embeds if possible, host fonts locally when feasible

**Defer**: Load scripts after the HTML has been fully parsed.

**Async**: Load scripts asynchronously to prevent blocking page rendering.

### **Additional techniques:**

Minification Prefetching Preloading Preconnecting Critical CSS



### 01

### **Browser Caching** Most underrated and least understood but very powerful. Stores copies of static files (like HTML, CSS, and images) in the user's browser.

### 02

**Server Side Caching Opcode caching:** php language-level caching

### 03

### **CDN Caching**

deliver it from the nearest server. Amazon CloudFront.

- **Object caching:** stores DB queries, and other fragments of data to avoid repeated computations Page caching: stores fully rendered pages as HTML

- Caches content at multiple locations around the world to
- Use a CDN service like Cloudflare, Jetpack, Fastly, Akamai, or

# Work on your PIP

Performance Improvement Plan Template

# **Performance Improvement Plan**

Note: This template is provided as an example. Districts or professional groups may choose other preferred templates. A Performance Appraisal and Development Plan should have been completed prior to a Performance Improvement Program in most circumstances.

### Participants:

Employee Name	Position	
Manager/Supervisor's Name	Position	
Senior Manager's Name	Position	
Work Area:		

### **Review Period:**

- Performance Improvement Period:
- Performance will be reviewed on
- Review will be documented in a performance improvement report completed by senior supervisor
- Final performance improvement review will be conducted on

Employee Responsibilities	Manager/ Supervisor Responsibilities	Senior Manager Responsibilities
•		•
•		•
•		•
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•		•
		•
•	•	3.0.2
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### 01

### Measure

your objectives

### 02

# **Decide on a performance budget** Where do you want to head? What's your gaol?

### 03

# Make changes

theme, plugins, setup caching etc.

### 04

# Measure again

**Set a baseline** - so you know if you've regressed and pick

# Start with your host, optimize your images, review your

Even a 10% change can have a huge impact

# Thank you!

for the slides, see https://jkudish.com/presents



If you have more questions, feel free to DM me on X @jkudish