**Heart Internet Presents** 

# TECHNICAL SEO FOR WORDPRESS

Get to grips with search engine optimisation with this handy guide from Heart Internet.

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An ebook version of this book is available at:

https://www.heartinternet.uk/blog/ technical-seo-wordpress-free-ebookdownload/

# Introduction

The power and flexibility of WordPress makes it hugely popular with not only developers and designers, but also with their clients. At Heart Internet WordPress is the most popular customer CMS by a country mile. Developers and designers love it because it allows them to create great looking sites, while clients love it because they can easily update the finished site.

But one aspect of creating a WordPress site that is often overlooked is technical search engine optimisation (SEO) and this can lead to huge problems for clients further down the line.

Now, some designers and developers would argue that SEO is completely the responsibility of the client and that it is something that needs to be worked on after the site is finished.

This is the wrong attitude for two reasons – the first is that there are some aspects of technical SEO that need to be addressed during the planning stage of a new website. The second is that any designer or developer who sees SEO as a job for someone else runs the risk of losing clients to designers and developers who offer technical SEO as part of the services.

Fortunately, getting to grips with technical SEO for WordPress is easier than you think. This guide contains everything you need to know and the good news is most of the hard work can be done via WordPress plug-ins so you don't even have to become an SEO specialist.

# Crawlability and indexability

This is the fundamental building block of technical SEO. If a search engine can't crawl or index a site, then it can't display that site in search results. Your job here is to structure sites in a way that search engines love. Here's what you need to do;

#### Website architecture

First up, you need to decide how the website will be structured. Here are the decisions you'll need to make:

## Folders v subdirectories

Best practice dictates that highly related content is all kept on the same domain using folders, but if a website will include sections that aren't related then these should be divided using subdomains.

Now, according to John Muller of Google, the search engine is pretty good at understanding how people are using folders and subdomains on their sites [1], but it always pays to make things as easy as possible for search engine to reduce the chances of things going wrong.

#### HTTP v HTTPS

It's now widely known that Google prefers HTTPS websites [2] and even gives a small ranking boost to sites using the protocol.
Using HTTPS is also a trust signal for potential customers of an online business, so it makes sense to use it for that reason too.

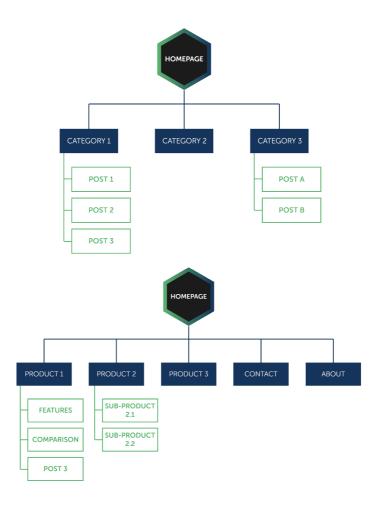
Always try and convince your clients to use HTTPS for these reasons. And always be sure to use 301 redirects from HTTP to HTTPS URLs so users will always access a secure page and there won't be any duplicate content issues.

#### www vs non-www

What matters here is consistency. Pick one option and then stick to it. Make sure you implement 301 redirects from the option you didn't choose to the one you did, and always use the option you picked in navigation and interlinking.

This will make sure users navigate through consistent URLs and that there won't be any duplicate content issues. You should also advise your client to set their preferred domain to either the www or non-www version of the site (depending on which one you chose) via Search Console [3]. Or, if you have access to the client's Search Console, you can always do it yourself.

# Site structure



If you're creating a site that will use the classic categories > posts format, then make sure that all pages link to your categories, and that your categories link to the posts. This creates a tree-like structure (see left) that search engines will find easier to crawl. It will also help users navigate the site, even if there are lots of posts.

If you're creating a site that uses pages, then make sure that the most important pages are always linked to from site navigation and that secondary pages are linked to from important pages. Again, this will create an easy to crawl site that is also good for users.

# Always use search engine friendly URLs

The golden rule with URLs is "can a user see what a page is about just by reading the URL"? If the answer to this is yes, then the URL is search engine friendly and good for users too. Never use special characters in URLs and never use uppercase letters as Windows servers are sensitive to this.

To change the URL structure for posts, head to the Permalinks section of WordPress settings. You'll either want to use "Post name" or a custom structure. For pages, set the URL when you create each page and make sure you follow the above rule.

The last thing to consider is whether you include a trailing / on your URLs. As with www vs non-www, this doesn't make a huge difference. It's just a case of being consistent and applying redirects to avoid duplicate content.

You can see more about SEO friendly URLs in WPBeginner's "What is a SEO Friendly URL Structure in WordPress?" [4]

#### Use breadcrumbs

#### Women's Running Shoes & Trainers at JD Sports

https://www.jdsports.co.uk/women/womens-footwear/running-shoes/
40 products - Stay at the top of your fitness game with our range of women's running shoes including
Nike, Fila and Asics trainers at JD Sports. Shop online today...
Nike - Asics - Diadora

#### Mens Running Shoes - Decathlon

www.decathlon.co.uk > Running, Trail and Track > Mens Running
Discover our collection of Mens Running Shoes for different kind of sports... Running shoes
Running, Trail and Track - Ekiden Active - Blue Lime KALENJI - ...

Using breadcrumbs is a great way to ensure users can navigate a site easily, and it will also help search engine crawlers get to grips with your site.

A breadcrumb path is based on a visitor's browsing history on the site, with the aim of letting people easily navigate back to a page they've recently visited.

Breadcrumbs are also used by Google to display nicer URLs in search results. You can see in the example below the first result doesn't use breadcrumbs, but the second one does.

These nicer URLs improve a site's snippet in search results, and can possibly lead to a high click through rate. There are plenty of plugins that let you implement breadcrumbs on a WordPress site.

# **Sitemaps**

A sitemap will help search engines discover your client's new website faster, so creating one on their behalf is a good idea. Obviously this is something that you'll do towards the end of the project, when all the URLs have been created.

There are loads of plug-ins out there that will create a sitemap automatically, so it's just a case of finding one that you like and does what you want it to.

Tip: If you're refreshing an old site, remember that most sitemap generators collect URLs from the database. When you redirect one post to another, the old URL will stay in the database and hence will still show up in your sitemap. That can lead to crawling issues. So if you're redirecting posts as part of a redesign, or just consolidating old pages, make sure you delete the old post from the database.

#### Robots.txt

There are few things to remember here. The first is to add the address of your sitemap to your robots.txt file to ensure its discovery.

Secondly, be very careful what you exclude from your robots.txt file. Don't exclude /wp-content/plug-ins/ or /wp-includes/ as these folders might include JS and CSS which needs to be crawlable by search engines.

Finally, if you want to stop the site's login URLs being indexed in search engines, then there's no point in excluding /wp-admin/ in robots.txt as that doesn't stop a page being indexed. Instead,

you might consider hiding such URLs from prying eyes using the X-Robots-Tag HTTP header [5] which acts in the same way as a page-level meta robots noindex tag – this does keep URLs out of the search results.

#### **Noindex**

There's a debate over what should be indexed and no indexed in WordPress. The answer is: It depends on your website.

Ideally, the meta robots noindex tag should be used to avoid the indexation of pages that don't bring much value to search engines. For instance, if your tag pages don't have unique content and only show excerpts, noindex them.

Do the same for your archive pages as they also contain just post excerpts and most likely are duplicates of your category pages anyway.

Some people also noindex their category pages. You can opt for noindexing category pages as well but make sure to add the tag as "noindex, follow" as category pages should be a main part of your website's navigation and you don't want to accidentally stop crawlers from reaching your posts.

#### **Crawl errors**

Even if you think you've got everything right in terms of site structure, it's always best practice to check for any issues with a crawler that can discover any issues you may have missed and that may be damaging the site.

For example, broken links create a bad user experience and can also reduce a site's standing with search engines. Some crawlers will also show you which pages are blocked by your robots.txt file, helping highlight any errors there. If you've used canonical tags or href lang tags, some crawlers will also let you see if they are working correctly. It's also a good idea to check if your noindex tag has been removed from all pages once the website is live.

There are some free crawlers out there such as Xenu [6], and more advanced ones such as Screaming Frog [7] which is free for websites (up to 500 URLs) and works with staging or dev areas too.

#### **Redirects**

Don't forget, if you're redesigning a website, you can redirect any pages that get removed or renamed as part of the process. You don't have to do this for every page, but using a 301 redirect will pass on the SEO authority of the old page to the new page, as well as helping users with an old link find what they're looking for. You should only create redirects when the topic of the new page is relevant to the topic of the old page.

If you do redirect pages, make sure you check to see which pages link to the old page. Then either replace the link with the new location, or remove the link if it no longer relevant.

You also need to avoid redirect chains where an old page is redirected to a new page, which is then redirected to a third page.

# **Speed**

Search engines love a fast site, so anything you can do to speed up your WordPress creations can help them rank better in search engines. Here are some ideas.:

# **Reduce TTFB**

Time to first byte (TTFB) is the amount of time it takes for the browser to start receiving the first piece of information from the server after the request was made. With WordPress, pages are served dynamically so it will take longer for the page to be constructed and sent over the wire than if the page was already done when requested. This is usually the main reason why your WordPress website might have a high TTFB. In order to avoid this you should try to cache static versions of your pages – luckily there are many plug-ins for WP that do that with just a few clicks such as W3 Total Cache [8], or WP Rocket [9] to name just a few.

You can test your website's speed performance using Google's Pagespeed Insights [10] to keep track of your improvements or use GTMetrix [11] or Web Page Test [12] if you want to test on your dev area directly.

You can learn more about TTFB in Varvy's "Time to First Byte (TTFB)" article. [13]

# **Optimise images**

Sometimes images can make a website slow due to their size. If you want to optimise your website's images you should always compress the images before uploading them. You can also use a WP plug-in that does the compression automatically such as WP Smush [14]. If you want to take your speed and image optimisation even further, you can always specify image dimensions [15] in either HTML or CSS and avoid scaling images in HTML as large unnecessary images will take time to download, especially on a mobile connection.

# Optimise the database

A lot of data can be accumulated in your website's database so it's good to clean it a bit once in a while. As usual, there are plugins that will help you do this and you can decide which one is best for your situation. If you need a helping hand with database optimisation, check out this guide which looks at both manual and plug-in based clean ups:

If you need a helping hand with database optimisation, check out WPMU Dev's guide that looks at both manual and plug-in based clean ups. [16]

# Disable hotlinking

Hotlinking is often overlooked, but it can steal a site's bandwidth and really slow down load times. Hotlinking occurs when someone links directly to images on your site.

As a site gets more popular, hotlinking can really become a huge drain on its resources so the best thing to do is to ensure no one can hotlink in the first place.

If you don't already know, you can learn how to block hotlinking in WPExplorer's guide to preventing image hotlinking with .htaccess. [17]

#### **Consider AMP**

Accelerated mobile pages (AMP) is, as the name suggests, a way to load mobile pages more quickly. You might have noticed AMP pages when searching via Google on a mobile device.

The main focus of AMP at the moment is content publishers, but you can also use it for ecommerce pages. If you need more information, check out our complete guide to AMP. [18]

If you decide that it's a route you want to go down, then you'll be able to find a plug-in that can do this for you. Find the one that's most up-to-date with all the changes from Google. You can use an online validator such as TechnicalSEO's Validator. [19] to check your implementation, or have a look in Google Search Console to see if there are any errors for your AMP pages.

# Security

Make sure all your hard work doesn't go to waste by doing as much as you can to protect your clients sites from hackers.

There are a number of things you can do as a designer or developer here, but you also need to make sure your clients are educated about how to keep their site secure.

Here are the areas you should consider:

## Keep everything up to date

Out of date WordPress installations, plug-ins and themes can pose a security risk. Make sure things are kept up to date and delete any old, unused plug-ins as soon as possible.

You should also make sure that only trusted plug-ins are installed. And make sure your clients are aware of the risks if they're installing plug-ins themselves. You may even want to install a malware scanner on your WordPress sites.

In terms of access to the site, make sure you don't use the default "admin" username and avoid using the default login URL. You may also want to use two-factor authentication and limit the number of incorrect login attempts that can be made.

For more details about these steps, and further WordPress security advice, check out WPMU Dev's security guide. [20]

# Use an all-in-one SEO plug-in

Too many plug-ins can slow down a WordPress website and raise security issues if they're not kept up to date, so you don't want to install 10 different SEO plug-ins to do 10 different jobs. Luckily there are plug-ins such as Yoast and All-in-one SEO that will cover most of your SEO needs. They both offer easy ways to write meta data, create sitemaps, edit robots.txt, import/export of SEO data and other useful things. They do differ in some aspects [21] so choose the plug-in that's best suited for your needs.

# Mobile friendly websites

If you're considering creating a mobile friendly website (and these days you need a very good reason not to), you should start with Google's page of best practices for WordPress [22]. As long as you follow these guidelines, your mobile optimised website will also be search engine friendly!

# **Rich snippets**

Rich snippets are great because they help you stand out in search results. If you've ever seen a website with a star rating visible on a Google search results page, then that's the result of rich snippets. We can't list every possible use of rich snippets here - there's just too many. The chances are that most of the sites you create will, in some way, benefit from the implementation of rich snippets.

There are many plug-ins out there that can help you get this done [23] so it's better to choose the one more suitable for the type of mark-up you want. Always use Google's Structured Data testing tool [24] to ensure the plug-in has done a great job.

# Summing up

Getting to grips with technical SEO for WordPress may seem a daunting task, but there are plenty of quick wins to be had and offering it will add another string to your bow. Put yourself in a potential client's shoes – which WordPress designer/developer would you choose? The one who offers technical SEO for WordPress as part of their service, or the one who doesn't?

# Resources

[1] Search Engine Roundtable – Google: How They Treat Subdomains vs Subdirectories in 2016

https://www.seroundtable.com/google-treat-subdomains-vs-subdirectories-22485.html

[2] Search Engine Land – HTTP to HTTPS: An SEO's guide to securing a website

https://searchengineland.com/http-https-seos-guide-securing-website-246940

[3] Google Search Console Help – Set your preferred domain (www or non-www)

https://support.google.com/webmasters/answer/44231?hl=en

[4] WPBeginner – What is a SEO Friendly URL Structure in WordPress

http://www.wpbeginner.com/wp-tutorials/seo-friendly-url-structure-for-wordpress/

[5] Yoast – Playing with the X-Robots-Tag HTTP header

https://yoast.com/x-robots-tag-play/

[6] Xenu's Link Sleuth

http://home.snafu.de/tilman/xenulink.html

[7] Screaming Frog SEO Spider

https://www.screamingfrog.co.uk/seo-spider/

[8] W3 Total Cache

https://en-gb.wordpress.org/plugins/w3-total-cache/

[9] WP Rocket

https://wp-rocket.me/

[10] Google PageSpeed Insights

 $\underline{https://developers.google.com/speed/pagespeed/insights/}$ 

[11] GTMetrix

https://gtmetrix.com/

[12] Web Page Test

https://www.webpagetest.org/

[13] Varvy – Time to First Byte (TTFB)

https://varvy.com/pagespeed/ttfb.html

[14] WP Smush Image Compression and Optimization

https://wordpress.org/plugins/wp-smushit/

[15] GTMetrix – PageSpeed: Specify image dimensions

https://qtmetrix.com/specify-image-dimensions.html

[16] WPMU Dev – Optimizing Your WordPress Database: A Complete Guide

https://premium.wpmudev.org/blog/optimizing-your-wordpress-database-a-complete-guide/

[17] WPExplorer – How to Prevent Image Hotlinking in WordPress

http://www.wpexplorer.com/prevent-image-hotlinking-wordpress/

[18] Heart Internet – Your complete guide to Accelerated Mobile Pages

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[20] WPMU Dev – 12 Ways to Secure Your WordPress Site You've Overlooked

https://premium.wpmudev.org/blog/wordpress-security-tips/

[21]: WPBeginner – Yoast SEO vs All in One SEO Pack: Which is the Best WordPress SEO Plugin?

http://www.wpbeginner.com/opinion/yoast-seo-vs-all-in-one-seo-pack-which-is-the-best-wordpress-seo-plugin/

[22] Google Guides – WordPress

https://developers.google.com/search/mobile-sites/website-software/wordpress

[23] WP Superstars – 6 Best Rich Snippets Plugins for WordPress: Schema Markup Made Easy

http://www.wpsuperstars.net/rich-snippets-schema-plugins-forwordpress/

[24] Google – Structured Data Testing Tool

https://search.google.com/structured-data/testing-tool/

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