SETUP SECURE OPTIMIZE CUSTOMIZE

The Tao of WordPress



Learn the Way of WordPress

"In the beginner's mind there are many possibilities, in the expert's mind there are few."

— SHUNRYU SUZUKI

Contents



Welcome

- 1 The Way of WordPress
- 2 One way, many paths
- 3 Who should read this book
- **3** WordPress enlightenment
- 4 What you will learn
- 4 Skill requirements
- 5 About the book

Code examples

Free WP theme

Free updates

Feedback

- 6 Layout conventions
- 6 Getting help
- **7** Follow the path...

Preparation

- 9 A fork in the road...
- 10 Roadmap
- 11 Required time
- 12 Required software

Text/code editor

FTP software

Web browser

- 14 Domain name
- 15 Web hosting

Free hosting

Shared hosting

Virtual private hosting

Dedicated hosting

Cloud hosting

Choosing the right host

Preparing your server

22 The database

Setting up a database and user with cPanel

Working with the database

24 Required files

The .htaccess file

The configuration file

- 27 Anatomy of a page visit
- 27 Checklist
- 28 Ready for action

Installation

- 31 The "famous 5-minute install"
- 32 Welcome to WordPress
- 33 The Toolbar
- 33 Main Menu
- Screen Options & Help menus
- 34 Welcome Message & Feature Pointers
- First steps with WordPress

Publish a post

Leave a comment

Customize widgets

Embed tweets and videos

- Import and export content
- 37 Create a network of sites

- 37 Publish content via email
- 37 Publish content from your computer
- 38 Automatic updates
- 39 Manual updates
- 39 Moving WordPress
- 40 Maintenance mode
- 40 Behind the scenes

Core files

/wp-content/

/uploads/

/wp-admin/ and /wp-includes/

Peripheral files

- 43 Backups!
- 44 Looking ahead

Configuration

- 47 Login screen
- 48 Lost password
- 48 User registration
- 49 Dashboard
- 50 Updates screen

50 Posts

All Posts

Add New Post / Edit Post

Add Media

Visual or Code

Toggle Sidebar

Insert Links

Status & Visibility

Post Editor

Media Content

Post Content

- 59 Categories and Tags
- 60 Media uploads

Create and configure the uploads directory

- 61 Upload New Media
- 62 Edit Media
- 63 Media Library
- 64 Add Media

Create a Gallery

Set the Featured Image

- 66 Pages
- 67 Comments
- 68 Appearance

69	Install Themes	Themes	
70	Widgets		
71	Menus	93	What is a WordPress theme?
72	Custom Header	94	Endless possibilities
73	Custom Background	95	Brief history of themes
74	Plugins	95	Default WordPress themes
75	Add Plugins	96	Tao of WordPress theme
77	Users		Tao Child theme
	User Roles and Capabilities	97	Types of themes
79	Add New User	100	Where to find good themes
79	User Profile		Free WordPress themes
80	Tools		Premium WordPress themes
81	Settings	102	Choosing the best theme
	General Settings		Features
	How to change the Site Address	104	Important things to check
83	Writing Settings	106	Installing & configuring themes
84	Reading Settings		Manual installation
85	Discussion Settings		Automatic installation
87	Media Settings		Configuration
88	Permalink Settings		On the front-end
89	Other Settings	108	Understanding themes
90	Next steps	109	Template Hierarchy

111 Inside template files

Inline comments

Template tags

PHP code

HTML/markup

The Loop

116 Key template files

Header Template: header.php

Index Template: index.php

Sidebar Template: sidebar.php

Comments Template: comments.php

Custom Functions: functions.php

Single Post Template: single.php

Page Template: page.php

- 118 Child themes
- **119** Customizing themes
- 120 Creating your own themes
- 121 Coming up

Plugins

- 123 How plugins work
- 124 Default WordPress plugins

Akismet

Hello Dolly

- 126 Plugins vs. widgets
- 127 Do you need a plugin?
- 128 Choosing the best plugins
- 130 Essential plugins
- 133 Installing plugins

Manual installation

Automatic installation

Terminology

- 134 Creating your own plugin
- 136 Plugin configuration
- 136 Staying current

Tightening Security

- 139 Why security is important
- 140 Security is for everyone
- 141 WordPress is secure.
- 141 Security of themes & plugins
- 142 First line of defense = common sense
- 143 Controlling access
- 144 Hardening WordPress

Disable version info

Delete install.php

Protect the configuration file

Protect the admin directory

Secure the uploads directory

149 Improving security with plugins

Login protection

Firewall

File monitoring

Activity monitoring

Security scanning

"All-in-one" security

Honorable mention

153 Optimizing plugin security

All-in-one and forget it

All-in-one plus monitoring & login security

Five focused plugins

Minimalist plugin combination

154 Advanced security techniques

Blocking bad bots

Protect your site with a firewall or blacklist

Controlling proxy access

Protect comments-post.php

Prevent hotlinking

162 Checking security of plugins & themes

Use a plugin to check other plugins

Use a plugin to check themes

Testing in debug mode

- 164 Security lockdown
- **166** More security help
- 166 Onward..

Optimizing Performance

170 Optimization overview

Establish a baseline

Factors to consider

- 172 Optimizing the server
- 173 Optimizing your site

General optimization techniques

Caching techniques

File compression

179 Optimizing WordPress

General optimization techniques

Optimizing the database

Caching with WordPress

185 Optimizing your theme

Optimize images

Minimize HTTP requests

Minify, combine, and compress

Use a Content Distribution Network (CDN)

Going further

- 193 Resources for optimizing performance
- 194 The path continues...

Improving SEO

- 197 Why SEO is important
- 198 First steps to better SEO

Premium SEO tools

200 Key aspects of SEO

On-site SEO

Social media & off-site SEO

Quality linkage

Quality content

Usability

Accessibility

206 SEO for WordPress

Search Engine Visibility

Enable permalinks

Meta tags

Canonical links

Robots.txt & humans.txt

Sitemaps

Clean up 404 errors

Keep an eye on traffic

- 215 Multipurpose SEO plugins
- 216 Google and Bing

217	On-page optimization	234	Using template tags	
219	Monitoring SEO		Example 1: Display a list of categories	
221	Going further		Example 2: Display a list of pages	
221	Up next		Example 3: Display a navigational menu	
	-	236	Customizing the Loop	
Customizing		239	Customize via functions.php	
		240	Customize via Child themes	
VordPress		241	Other ways to customize WordPress	
	, ar ress	246	One for the road	
223	What can be customized?			
225	Stay on the path	To	chniques	
225	Customize via plugin	160	Techniques	
226	Customize via widget	250	Integrate social media	
227	Customize via shortcode		Social media sharing	
	Display a snippet of text		Twitter	
	Display the current date		Facebook	
	Display a link to the homepage		Google	
229	Customize by choosing a new theme		Other social media services	
229	Customize via theme settings	257	Serve mobile-friendly web pages	
230	Customize via theme template files	259	Use WordPress outside of WordPress	
	Example 1: Changing fonts with CSS	260	Embed syndication feeds	
	Example 2: Create a custom page			
	Example 3: Customize the footer			

262	E-commerce & shopping carts	Tip	s & Tricks
265	Forums & bulletin boards		o de l'illento
267	Galleries & slideshows	287	Tao of WordPress Theme
269	Lightboxes & sliders	288	Add a logo to the header
	Lightboxes	289	Customize featured images
	Sliders	290	Customize post formats
272	Set up a chat forum	291	Display read-more links
	Styling the chat form	292	Add new widgets via child theme
	Require login to view content	293	Integrating Contact Form 7
276	Enable visitors to submit content	294	Import files into the Media Library
	Displaying uploaded images	295	Displaying audio and video
278	Customize the Dashboard	296	
279	Customize the Toolbar	290	
280	Ajaxify WordPress		
	Ajax-powered comments		
	Ajax-powered contact forms		Customizing autosave and revisions
	Ajax-powered login & registration	298	Infinite scrolling for posts
	Ajax-powered search	299	Display blog posts on their own page
	Ajax-powered themes	299	Display blog posts off their own page
284	Continue the journey		
	Articles and tutorials		

Here's to you!

300 jQuery tricks for WordPress

Break out of frames

Open external links in new tab

Target all image links

Preload images

Clean up empty elements

Target iPod, iPhone, and iPad

Scroll internal links

Dynamic scroll to top link

Display a popup message

Clone any element and display it anywhere

Change text and HTML on the fly

307 Until next time...

Appendix

- 309 Getting help with WordPress
- 310 Troubleshooting
- 312 Monitoring and measuring
- 314 Fixing errors

About this Demo

This is a PDF demo of the book, The Tao of WordPress. It contains the entire Table of Contents and the first several pages of each chapter.

Note that, depending on the app used to view this demo, hyperlinks may be disabled. In the complete book, however, all hyperlinks are enabled in the Table of Contents and throughout the book.

"Move and the way will open."

— ZEN PROVERB





The Chinese character 道 represents the Tao. Learn more @ https://wp-tao.com/2



Visit the official WordPress site for downloads, themes, plugins, documentation and more.
(a) https://wordpress.org/

Welcome

In the philosophy of Taoism, the "Tao" refers to the "way" of the universe. The Tao is the experience of life, with all of its fullness, emptiness, and constant change. To live in harmony with the Tao is to "go with the flow" of nature, toward greater levels of understanding, simplification, and efficiency.

You're now on a journey that applies these fundamental principles to WordPress, a powerful and flexible publishing platform for the Web.

Just as there is a way to write a book or build a skyscraper, there is a way to build awesome websites with WordPress. The Tao of WordPress is understanding the software and working in harmony with its native functionality. By simply going with the flow of WordPress, the process of building, customizing, and managing websites becomes an almost transparent, effortless process.

The Way of WordPress

WordPress has evolved from a humble blogging platform into a powerful and flexible Content Management System (CMS). In early versions of the software, working with code was integral to using and customizing WordPress. Now that WordPress has matured (celebrating its 15th Anniversary in 2018), it's possible to create virtually anything — from simple blogs to networks of e-commerce sites — without touching a drop of code.

- 1. About Taoism
- @ https://wp-tao.com/3
- 2. Tao and Taoism
- @ https://wp-tao.com/4
- 3. What is Tao?
- @ https://wp-tao.com/5

One way, many paths

Within the Tao of WordPress, there are infinitely many paths for developers, designers and users to achieve their goals. Out of the box, WordPress gives you a robust, dynamic platform that may be customized and extended to create virtually anything:

- Twitter/Tumblr-style blogs
- · Image galleries/portfolios
- · E-commerce/shopping sites
- Forums and bulletin boards
- Membership/download sites
- ...and everything in between¹

Even better, many types of sites can be designed and customized from the comfort of the luxurious WP Admin Area, where you have literally thousands of free plugins, themes, and widgets at your fingertips. Need a forum? Install a plugin (or several). Want a cool image-gallery? Install a theme and done.

From small blogs to integrated e-commerce sites, the vast extensibility of WordPress makes building many projects an efficient, "plug-n-play" event. And, best of all, WordPress is open-source and 100% free.

- 1. More examples of awesome sites built with WordPress:
 - @ https://welovewp.com/
 - @ https://wordpress.org/showcase/
 - @ https://kinsta.com/blog/wordpress-site-examples/



Perishable Press is proudly powered by WordPress. (a) https://perishablepress.com/



Digging Into WordPress is also powered by WordPress.

(a) https://digwp.com/

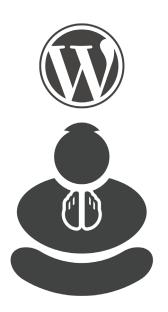


WP-Mix is a responsive, grid-based site powered by WordPress.

@ https://wp-mix.com/

WordPress themes are sets of files that can change the look and feel of your site. They're covered in-depth in the Themes chapter.

WordPress plugins are sets of files that can change or add new functionality of your site. They're covered in-depth in the Plugins chapter.



- 1. Official sources of WordPress information:
 - (a) https://wordpress.org/
 - @ https://wordpress.org/news/
 - (a) https://planet.wordpress.org/

Who should read this book

This book is aimed at beginners seeking to learn the essentials of using, customizing, and extending WordPress. Additionally, the book serves as a useful, practical guide for any proud owner of a WordPress-powered website.

While those new to WordPress will benefit from the book's clear, concise information, enthusiasts and experts will appreciate the elegant simplicity of the presentation. It's a clear signal focused on making the most of WordPress.

For beginners, students, enthusiasts, designers, developers, hobbyists, experts, admins, and clients — The Tao of WordPress is the perfect guide for *any* WP user.

WordPress enlightenment

WordPress is a vast topic, with endless documentation, tutorials, tricks, and tips available online, in books, podcasts, screencasts and slideshows. And it's all available to anyone — 24 hours a day, seven days a week, 365 days a year. ¹

Unless you know where to begin and how to proceed, however, the endless ocean of WordPress information can be overwhelming. But there's no need to learn it all, or even hire someone else to do it for you. All you need is WordPress, this book, and your imagination. Once you begin, WordPress enlightenment is inevitable.

Getting started with WordPress is easy. Once you get to know the software and its potential, what you do with it is entirely up to you. Whether it's configuring the default theme, customizing your own, or even creating advanced designs, WordPress provides an efficient, flexible platform that makes it all possible.

"Do, or do not. There is no try."

— YODA





The Chinese phrase 成功 "Cheng Guon" represents success and prosperity.

Preparation

Everyone needs a plan. Even if it's a plan to do nothing, at least you know what's going on. When working with software, it's a good idea to have an understanding of what it does, how it works, and what's involved. This chapter provides an overview of the entire process, explains the required tools, and delivers a plan of action for getting started with WordPress.

A fork in the road...

As we begin our WordPress journey, we have a decision to make. The road ahead forks into two paths. The first path leads to <u>WordPress.com</u> for a free WordPress account. The second path leads to <u>WordPress.org</u> for a complete, self-hosted installation of WordPress. Either of these paths lead to a free WordPress-powered site, but there are some key differences to consider. Here is a quick summary:





- Advertisements may appear on your site
- · Limited storage (paid upgrades available)
- · Limited customization options, no plugins
- · Your site's URL will be "whatever.wordpress.com"
- No access to files or database
- All updates performed by WordPress.com
- Get a free account @ https://WordPress.com/



- Self-hosted WordPress on your own server
- No ads on your site (unless you put them there)
- Unlimited storage (based on your hosting plan)
- \cdot Unlimited customization options, plugins, etc.
- Your site URL will be whatever you choose
- Full access to files and database
- $\boldsymbol{\cdot}$ You perform all updates of themes, plugins, and core files
- Download WordPress free @ https://WordPress.org/

If you choose <u>WordPress.com</u>, you'll have a site set up immediately after registration. Simply log in to customize your settings and begin adding content. The features included with the free account are perfect for small sites and blogs, and paid upgrades are available to do even more.

Or, if you choose <u>WordPress.org</u>, you'll find a good web host, register your own domain name, and host WordPress on your own server. Self-hosting means that you have full control over every aspect of your site, including the database and all files. Self-hosted WordPress unlocks its full potential.

So which path to choose? Signing up for a hosted account is fast, free and easy. If you love it, great. Skip ahead in the book to the configuration chapter and continue from there. Then, when you're ready to take it to the next level with self-hosted WordPress, you'll benefit from any experience acquired using WordPress.com.

That said, the majority of this book is for *self-hosted* WordPress. From this point forward, you'll learn about every step of the process, from installation and configuration to optimization and security. Before unlocking the full potential of WordPress, let's "zoom out" for a quick overview of the road ahead.

Roadmap

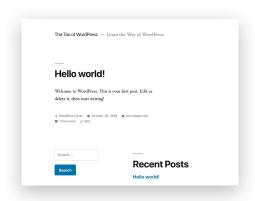
Here is a general overview for creating websites with self-hosted WordPress:

- 1. Find a good web host, set up your domain, and create a database
- 2. Download WordPress, unzip the files and upload to your server
- 3. Edit the WordPress configuration file with database credentials
- 4. Install WordPress using its "famous 5-minute installation"
- 5. Configure your site's settings via the WP Admin Area



Each account at WordPress.com provides a user-dashboard with blogs, stats, and more.

WordPress.com is perfect for small blogs, WordPress.org is perfect for any website.



'Twenty Nineteen' is the current default active theme. It's minimal, flexible, responsive, and destined to be replaced by 'Twenty Twenty'.



For what it's worth, it generally takes me about an hour to set up a fully configured, self-hosted WordPress site. From there, the amount of time spent customizing and adding plugins/themes varies depending on the goals of the site.

Once WordPress is installed, your site is essentially ready to go. If one of the default themes suits your needs, then you can jump right in and start adding content. Or, if the default themes aren't exactly what you had in mind, you can begin customizing WordPress. From the comfort of the Admin Area, customizing WordPress is as easy as trying new themes, installing plugins, and configuring widgets and settings.

If existing themes and plugins don't get you there, you can venture further into WordPress by creating and customizing your own. This involves working with code, and enables you to create original designs with unique functionality.

Lastly, after configuring and customizing your site, you want to make sure that it's optimized and secure. These final steps are critical to running a healthy website, and are covered in their own chapters later in the book. For now, let's continue planning with a quick look at the basic requirements.

Required time

WordPress claims a "famous 5-minute install" process, but there's more to the story. Before getting to the 5-minute installation, you need a domain name, web host (i.e., web server), and a database. With experience, these initial steps can go quicker, but may require some quality time while learning the ropes.

If you're new to WordPress, plan for a few hours to soak it all in, find good hosting, register a domain name, configure the server, and set up the database. Then plan for another hour to install, configure, and get to know WordPress. Again, with experience it's possible to streamline the process to require much less time. But it's not a race. Take as much time as needed to understand your actions and make the best decisions. By taking your time and doing it right, you establish a solid foundation for creating and working with WordPress.

"Simplicity is the ultimate sophistication."

— LEONARDO DA VINCI



和平

The Chinese word 和平 "Hépíng" represents tranquility, calmness, and peace.



Some web hosts offer "one-click" installations of WordPress. This can save time, but it's also beneficial to understand what is happening behind the scenes. Ask your host for details.

Installation

Having met the requirements on our "pre-install" checklist from the previous chapter, we're now ready to install WordPress and watch the magic happen. For the initiated, WordPress installation may be described simply as, "unzip/upload, edit the wp-config.php file, and visit /wp-admin/install.php in your browser." With understanding and experience, installing WordPress can be that easy.

Yet, rather than end the chapter here, let's walk through the installation process, ¹⁻² explaining the details of each step. We'll then take a tour of WordPress, go for a quick test-drive, and look at some important administrative functionality. So now, for the moment you've been waiting for, it's time to install WordPress.

The "famous 5-minute install"

Here are the steps required to install WordPress, with some key tips and tricks presented along the way. Make sure you've met the requirements as explained in the previous chapter before attempting to install WordPress.

- **Step 1.** (Optional) Rename your /wordpress/ directory to something unique, like "wp". This is a security measure that helps to "hide" your WordPress files from automated attacks. The more obscure the name, the better.
- **Step 2.** Connect to your server using your FTP program and upload the entire WordPress directory to the web-accessible root directory of your site. This is typically named "httpdocs", "htdocs", "home", or similar.
 - 1. WP Codex: Installing WordPress
 - 2. WP Codex: Installation Techniques
- @ https://wp-tao.com/545
- @ https://wp-tao.com/583

- Step 3. Open your browser and enter the following URL in the address bar: https://example.com/wordpress/wp-admin/install.php (note: replace "wordpress" with the name chosen in Step 1, and replace "example.com" with your domain name).
- **Step 4.** Now on the WordPress installation page, fill in the required fields with your information. For the username, it's good practice to choose something other than "admin" to help secure your site against automated attacks. Also remember to choose a strong password.
- **Step 5.** Once you've completed the fields, click "Install WordPress" to make it so. After WordPress is installed, you'll see a "Success" page that displays your username along with a "Log In" button.

If you made it to the "Success" page, congratulations, WordPress is now installed. Click the "Log In" button to enter the Admin Area and begin using WordPress. Otherwise, if something unexpected happens and you get stuck, visit the Troubleshooting Guide in the Appendix for help.

Welcome to WordPress

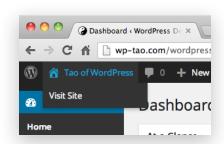
Logged in to the Admin Area, you'll notice the main menu to the left of the screen, and the WordPress Toolbar running along the top of the page. In the Admin Area, you have control over many settings and options. Before getting into configuring everything, let's take a tour of the highlights of your new WordPress-powered site.

First let's visit the public-facing side, or front-end of the site. An easy way to get there is from the Toolbar at the top of any screen. Just hover over your site's name and click the link to "Visit Site". When you visit the front-end, you'll see the default active theme, *Twenty Nineteen*. Take a few moments to surf around the front-end and familiarize yourself with the theme's appearance, features, and so forth.

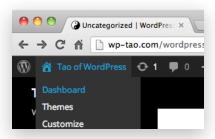
Note: If you do not specify a password, one will be generated for you and displayed on the "Success" page. If you do not specify a username, WordPress will use the default name, "admin".



The installation "Success" page lets you know that everything went according to plan. Click the button to log in and start using WordPress.

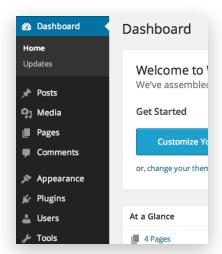


To visit the front-end of your site, hover your site's name in the Toolbar and click "Visit Site".



To return to the Admin Area from the public side of your site, hover over your site's name and click "Dashboard" or other destination.

Note: The Toolbar is displayed on the front-end only for users who are logged-in to WP. Try logging out and watch the Toolbar disappear.



The main menu in the WordPress Admin Area provides links to just about everything.

Once you've seen the default theme, you may want to jump right in and begin customizing. Before we get into themes, plugins, and the myriad ways to customize WordPress, let's return to the Admin Area and continue the tour.

The Toolbar

An easy way to get to the Admin Area is via the Toolbar. As before, hover over your site's name and select your destination. The Toolbar makes it easy to jump back and forth between the back-end and front-end of your site.

Later in the book, we'll learn how to <u>customize the Toolbar</u> with links and other tools. For now, just know that it's there to provide a more seamless experience with WordPress, putting all the essentials within easy reach.

By default, the Toolbar is displayed across your entire site, on all pages on the front-end and back-end. While there are plugins to disable the Toolbar site-wide, WordPress itself only makes it possible to disable the Toolbar on the *front-end*. This is done by visiting your Profile page in the Admin via Users > Your Profile, and then unchecking the box to "Show Toolbar when viewing site".

Main Menu

In the Admin Area on the left side of the screen is the WordPress main menu. The main menu contains links to most of your site's settings, plugins, themes, and everything else. We'll be going through the entire Admin Area in detail in the next chapter. For now, take a quick jog through the menu items to see what's available.

Hint: to save screen space, you can click the "Collapse menu" button beneath the main menu, and then click again to restore the full-width menu.

"The object is not to make the tree look like a bonsai, but to make the bonsai look like a tree."





"Configuration" is written as 組態 in Traditional Chinese. Now you know.



The WordPress login screen, where it all begins.

Configuration

At this point, having successfully installed WordPress, you are literally ready to rock. In this chapter we'll continue with a concise tour of the Admin Area, configuring WordPress along the way. 99% of the configuration process is handled via the luxe comfort of the Admin Area. The other 1% involves doing small tasks on the server.

Our configurational tour will coincide with the order in which settings and tools are presented to users in the Admin Area. This will help to familiarize the reader with WordPress, while configuring all available settings along the way. It's a win-win.

As we get into configuring WordPress, we'll see that the default WordPress settings are optimal for most scenarios. In other cases, existing options may prove insufficient for your specific needs. Whatever the case, we'll optimize all settings using the cleanest, most efficient methods possible. Along the way, we'll see some useful plugins and techniques to extend and enhance our WordPress-powered site.

Login screen

The Login screen is where registered users can log in to the Admin Area. It's available via either of these URLs:

- https://example.com/wordpress/wp-login.php
- https://example.com/wordpress/wp-admin/

For each of these URLs, replace "example.com" with your domain name, and "wordpress" with the name of the installation directory. If WordPress is installed in the root directory, the login page is located at https://example.com/wp-admin/.

Lost password

If any registered user (including the primary admin) forgets their password, a new one may be requested by clicking "Lost your password?" from the Login screen. If needed, the lost-password page is available at the following URL:

• https://example.com/wordpress/wp-login.php?action=lostpassword

As always, edit the URL with your specific domain and WP directory. For more ways to change or reset your password with WordPress, check out DigWP.¹

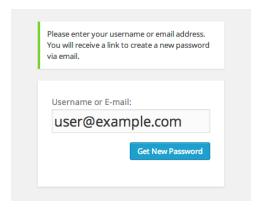
User registration

By default, WordPress *disables* registration for your site. If you look at the screenshots of the login and password pages, you'll notice there is no link to "Register" for the site. As we'll see later on, you can enable user-registration at any time by visiting Settings > General, and checking the box, "Anyone can register". When registration is enabled, the login and password screens will display a link to the registration page. You may also access it directly via its URL:

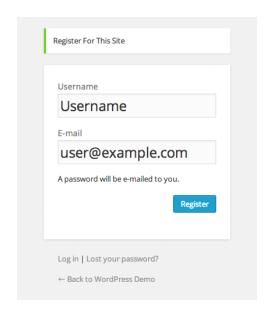
• https://example.com/wordpress/wp-login.php?action=register

After a visitor registers with your site, they will be able to log in and customize their profile and do whatever it is they are allowed to do, according to their default User Role, which is set in the General > Settings as "New User Default Role". For more information, visit the <u>Users section</u> later in this chapter.

1. Five Ways to Change Your WordPress Password @ https://wp-tao.com/61

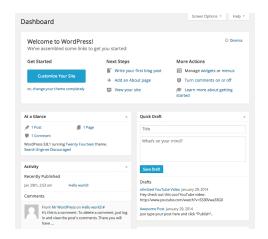


Enter your username or email address to retrieve your password. Easy peasy.



When registration is enabled, visitors will be able to register for membership at your site.





Out of the box, the WP Dashboard is a mess.



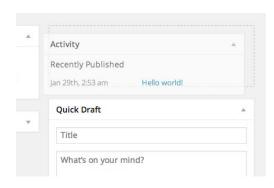
A few clicks later and the Dashboard is simple, refreshing, and ready for custom widgets. Similar streamlining may be done using the Screen Options for many screens throughout the Admin Area.

Dashboard

The WordPress Dashboard is the first thing you'll see when logging in to WordPress. It displays a variety of default widgets for recent comments, news, and much more. As explained in the previous chapter, Screen Options are available to customize key pages in the Admin Area. With just a few clicks, you can optimize the Dashboard with tools and resources to help streamline your administrative process.

As of WordPress 3.8, the WP Dashboard has changed dramatically¹, and many long-standing and useful features were suddenly removed without replacement. This means that the default WP Dashboard is somewhat less useful than in previous versions, but there are some ways to configure what's left to better suit your needs.

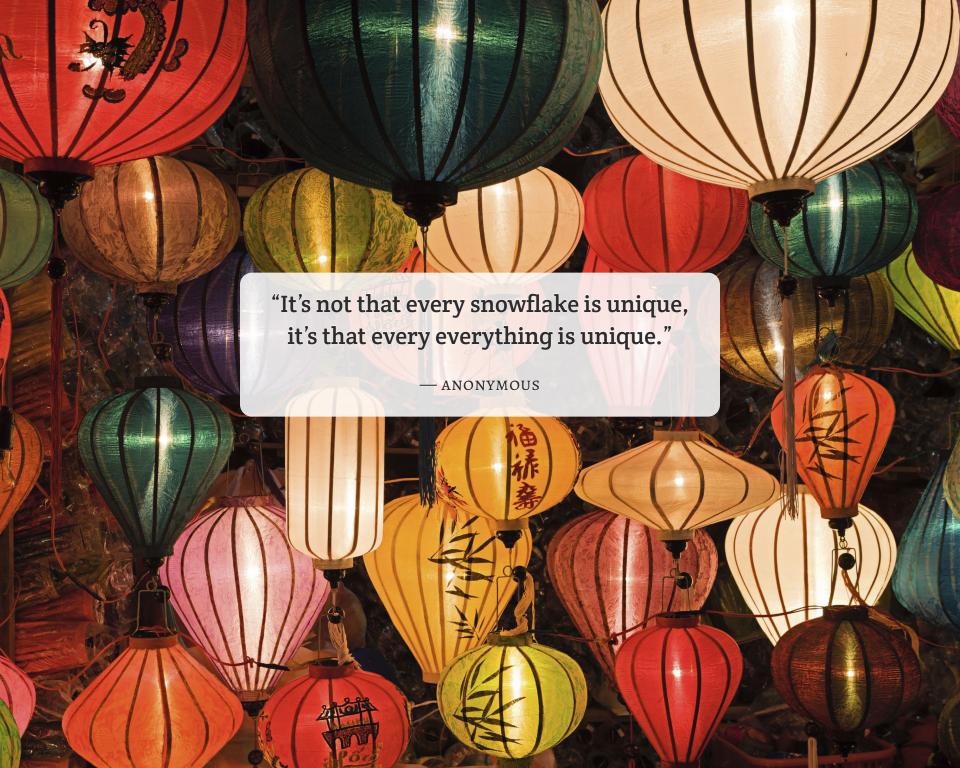
For example, you can select which dashboard widgets to display in the Screen Options, and each displayed widget may be toggled open and closed by clicking on its title bar. Perhaps most useful for organizing the WP Dashboard is the ability to rearrange the order in which the widgets appear by simply grabbing their title bars and moving them into position (see screenshot at right).



Example showing the "Activity" widget en route to its new location above the "Quick Draft" widget.

Even better, it's possible to create your own custom widgets for your WordPress site. You can include custom links, content — just about anything you can imagine. Learn how in the Customize the Dashboard section of the Customization chapter.

^{1.} For example, the option to select single-column dashboard layout. For a fix see DigWP @ https://wp-tao.com/642





The Chinese characters 設計 mean to design, layout, or plan.



The Tao of WordPress theme is minimal, responsive, and perfect for learning WordPress. Log in to the Members Area for FREE download.

Themes

If you've followed along with the book this far, your site is now ready for customization via themes and plugins. In this chapter, the possibilities become endless as we explore WordPress themes — what they are, how they work, where to get them, and much more. In the next chapter, the path continues with plugins.

Unlike anything else, themes enable you to transform the appearance and functionality of your entire site with a just a few clicks. Themes are the heart of WordPress, enabling virtually anyone to create awesome websites. Whether you want a simple blog or full-featured e-commerce site, themes can make it happen, usually for free, and with minimal effort.¹

What is a WordPress theme?

We've already seen that a WordPress site comprises a core set of files, a database, and optionally an .htaccess file. Within the core files are numerous default themes, including *Twenty Seventeen* and *Twenty Nineteen*. Every WordPress theme consists of a set of folders and files that collectively change your site's appearance and functionality. All installed themes are located at /wp-content/themes/.

There are literally *thousands* of WordPress themes available on the Web, and many of them are freely available from the WP Themes Directory.² Outside the Themes Directory, there are free themes, premium themes, and everything in between. To navigate the endless ocean of themes, understanding and strategy are essential.

- 1. WP Codex guide to using themes @ https://wp-tao.com/88
- 2. The WordPress Themes Directory @ https://wp-tao.com/89

Endless possibilities

The good news is that there are themes for virtually every occasion, business, portfolio, personality, and style imaginable, and many of them are free. The not so good news is that some themes are, well, not so good. And finding the good ones can be a tedious process. Fortunately, this chapter brings eight years' worth of WordPress experience to help you understand and find the perfect theme.

WordPress themes range from simple to complex, free to expensive, and minimal to "ultimate deluxe premium advanced". Some themes, such as the *Tao of WordPress* theme included with this book, are "starter" themes that facilitate learning and promote customization. Other themes are more elaborate, feature-rich, and luxurious. And then there's everything in between. It's really up to you.

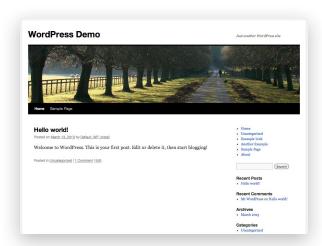
Personally, I prefer simple themes that are focused on a particular type of site. They tend to be less convoluted, bloated, and expensive than themes that try to "do it all" with a zillion features. Certainly, there are some awesome deluxe themes that will rock your website, but there are other factors to consider.

In general, the better the theme, the less code you have to touch. As we'll see later on, there are many ways to customize themes, such as the "Theme Options" screen in the Admin Area, installing plugins, and editing code. Indeed, if you're comfortable with code, than *any theme* has the potential to be great. Or even better, you can build your own theme to make everything exactly perfect.

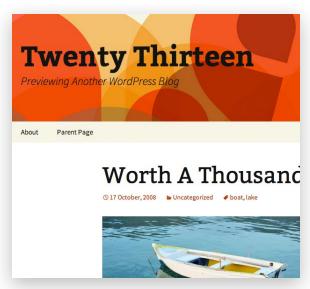
Using this chapter as a guide, you'll learn how themes work, how to customize them, and how to find the perfect theme for your WordPress-powered site.



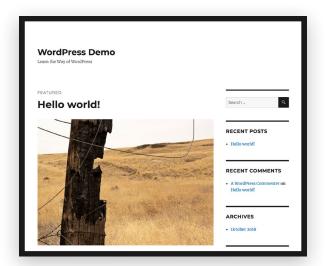
'Kubrick', one of the first default WP themes. (a) https://wp-tao.com/90



After Kubrick, there was 'Twenty Ten'. (a) https://wp-tao.com/91



Here is a screenshot of the wildly colorful 'Twenty Thirteen' default theme.
(a) https://wp-tao.com/92



'Twenty Sixteen' is one of the three default themes currently included with WordPress. (a) https://wp-tao.com/93

Brief history of themes

When I first got into WordPress, back in 2005, there were only a few hundred themes available. In fact, I recall a blogger who had listed all of them in a post, and for the next couple of years, actually managed to keep the list current. But keeping track of the eventual explosion of WordPress themes proved to be an impossible task. As WordPress' popularity grew, so did the quantity and quality of its themes, and virtually all of them were free, until around 2007.

After the boom of awesome, user-made, open-source WordPress themes, the commercial market caught the scent. Swiftly, websites began selling "premium" themes, which boasted more features and better support. For the next several years, from around 2009 thru 2011, the premium theme market exploded, leaving WordPress users with a growing abundance of incredible themes.

Since that time, WordPress themes have continued to multiply and evolve. Better features. Responsiveness. Mobile themes. UX wizardry. In the premium theme market, competition remains *fierce*. And that translates into better themes and better deals for WordPress users. But navigating the vast ocean of themes can be an overwhelming task, so let's continue the journey with a look at some of the themes that are immediately available to you.

Default WordPress themes

Included with the core files, in the /wp-content/themes/ directory, are numerous themes, including *Twenty Seventeen* and *Twenty Nineteen*. These default themes do a good job of utilizing native WordPress functionality. My recommendation is that, if one of the default themes works for you, use it. Continuing in the book, we'll refer to the *Tao of WordPress* theme while learning how to customize the appearance and functionality of *any* WordPress theme.

"It's supposed to be automatic, but actually you have to push this button."

— JOHN BRUNNER





The Chinese characters 延長 mean to expand, extend, or develop.



The WP Plugin Directory includes over 50,000 plugins. And they're all available for automatic installation from the Appearance screen in the Admin Area. Or visit the WordPress.org and download direct (a) https://wp-tao.com/77

Plugins

Plugins enable you to extend WordPress' built-in functionality to do almost anything. With just a few clicks, you can integrate shopping carts, social networking, bulletin boards, member forums, custom content, advertising, slideshows, and so much more. Seriously, these days WordPress users enjoy a wealth of free, awesome plugins that can do just about anything imaginable.

In this chapter, we'll learn how plugins work, what to look for in a good plugin, where to find plugins, and everything in between. We'll also see how to diagnose and resolve potential issues, and how to test your plugins for proper functionality. Along the way, we'll mention some of the most useful plugins, and check out a list of the most essential plugins for *any* WordPress site.

Overall, this chapter is straightforward: find, install, and use the best plugins to extend WordPress to do amazing new things.

How plugins work

Plugins provide a way to extend WordPress' default functionality without modifying any of its core files. Using the plugin API,¹ developers can hook into the WP core, take advantage of existing functionality, and integrate their own custom scripts. This extensible nature of WordPress has summoned over 24,000 plugins to the WP Plugin Directory,² and many others elsewhere on the Web.

- 1. WP Plugin API
- @ https://wp-tao.com/152
- 2. WP Plugin Directory @ https://wp-tao.com/77

Default WordPress plugins

Out of the box, WordPress includes two default plugins: Akismet and Hello Dolly. They are inactive by default, and may be deleted if they are not needed. Or, it's also perfectly fine to leave them installed, but inactive. Either way, let's take a quick look at each of these plugins and why they are included with WordPress.

Akismet

Far and away, Akismet is one of the best anti-spam plugins available. Once activated, you're prompted for your "Akismet API key", which is available by signing up at the plugin's website. After obtaining your key, visit the "Akismet Configuration" screen to enter it and choose a couple of basic options.

Once enabled, Akismet runs silently behind the scenes, checking comments and blocking spam. You can check the spam bin at any time by clicking the "Spam" link on the Comments screen. Occasionally, Akismet will miss a spam comment, or a legitimate comment will get flagged as spam. Periodically, you may want to scan through the spam bin and rescue any false positives, or "ham".

After it's collected some data, Akismet displays your "ham-vs-spam" statistics on the "Akismet Stats" screen, available from the Dashboard menu. There you will find lush charts and graphs displaying your comment statistics every which way.

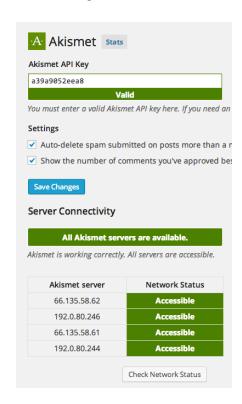


After activating Akismet, a new link, "Akismet Stats", will appear in the Dashboard menu. Akismet provides detailed reports about "spam" and "ham" comments. Spam refers to illegitimate comments, and ham refers to good comments that were rescued from the spam bin. Learn more at DigWP.com:

@ https://wp-tao.com/153



After activating Akismet, it will display a notice at the top of the page, explaining that the plugin is active but not enabled until you enter you "Akismet API Key". To do so, visit the "Akismet Configuration" screen, as seen below.



Howdy, Default_WP_

Dolly'll never go away

Screen

```
1 <?php
2 /**
3 * @package Hello_Dolly
4 * @version 1.6
5 */
6 /*
     Plugin URI: http://wordpress.org/extend/plugins/hello-dolly/
Description: This is not just a plugin, it symbolizes the hope and enthusiasm of an entire
           function hello_dolly_get_lyric() {
         runction hello_dolty_get_lyric() {
    /** These are the lyric() {
    /** These are the lyric() to hello Dolly */
    well, hello, Dolly
    it's so nice to have you back where you belong
    You're lookin' swell, Dolly
    I can tell, Dolly
    You're still glowin', you're still crowin'
    You're still goin' strong
  24 We feel the room swayin
          While the band's playin'
One of your old favourite songs from way back when
So, take her wrap, fellas
         Find her an empty log, fellas
bolly'll never go away again
Hello, bolly
Mell, hello, bolly
It's so nice to have you back where you belong
You're lookin's swell, bolly
I can tell, bolly
I can tell, bolly
I can tell, bolly
You're still glowin', you're still crowin'
You're still glowin', you're
We feet the room swayth
One of your old favourite songs from way back when
folly, gee, fellas
Find her a vacant knee, fellas
bolly'll never go away
           Find her an empty lap, fellas
Dolly'll never go away
Dolly'll never go away
Dolly'll never go away again";
                      return wptexturize( $lyrics[ mt_rand( 0, count( $lyrics ) - 1 ) ] );
            // This just echoes the chosen line, we'll position it later
  // Now we set that function up to execute when the admin_notices action is called add_action( 'admin_notices', 'hello_dolly' );
           function dolly_css() {
                     // This makes sure that the positioning is also good for right-to-left languages $x = is_rtl() ? 'left' : 'right';
                     padding-top: 5px;
margin: 0;
font-size: 11px;
                      </style>
           add_action( 'admin_head', 'dolly_css' );
```

While many plugins consist of numerous files and hundreds or thousands of lines of code, 'Hello Dolly' consists of a mere 80-ish lines. Shown here is the entirety of the plugin's source code. An excellent learning tool.

Hello Dolly

Also included with WordPress, the *Hello Dolly* plugin is much simpler. After activating the plugin, a random line from Louis Armstrong's unforgettable song, "Hello Dolly", is displayed in the upper-right corner of every page in the Admin Area.

This plugin, as far as I can remember, has always been included with WordPress, so it holds a special significance, and even more so for Jazz enthusiasts. In the words of WordPress-founder, Matt Mullenweg:

"This is not just a plugin, it symbolizes the hope and enthusiasm of an entire generation..."

Hello Dolly also serves as a good example of the potential simplicity and elegance of plugins. The plugin consists of a single PHP file that contains less than 100 lines of code. This simplicity provides an opportunity to learn and see how plugins work.

Take a moment to open the Hello Dolly file in your code editor. It's located at /wp-content/plugins/hello.php. Then edit some of the quotes beginning on around line 18 with some of your own. Finally, upload the plugin file and visit the Admin Area to see the results. The quotes are random, but at some point, you'll see your custom quotes displayed right there in the Admin Area.

While tinkering with the hello.php file, locate "font-size: 11px;" and change it to "font-size: 24px;". Then upload the file and revisit the Admin Area, where you should see the quotes displayed in a larger font-size. This is an example of how it's possible to change the appearance of WordPress by using a plugin.

Feel free to experiment further with the hello.php script. Learn from it, memorize a few classic Armstrong quotes, and then either delete it or leave it enabled to keep the dream alive.

"Risk comes from not knowing what you're doing."

— WARREN BUFFETT





The characters 安全 represent security.



WP Codex guide to hardening WordPress (a) https://wp-tao.com/169

Tightening Security

If your site is on the Web, it's going to be attacked. That's the grim reality. And even more disconcerting is the fact that, if your site is online, there is no such thing as perfect, 100% security. Anyone who says otherwise is lying. It is possible, however, to protect your site against a large percentage of attacks, especially the automated ones, which are by far the most common.

Using malicious scripts, criminals can scan thousands of sites for vulnerabilities in minutes. If you examine your server logs, you will see the patterns of automated scanning, it happens constantly. Picture legions of hungry animals looking for their next meal, with your site as an "all you can eat" buffet, and you've got the idea.

In this chapter, we employ strong measures to secure our site against automated scanning, spamming, and hacking. By applying layers of security to our sites, we can protect against automated attacks, malicious exploits, and other nefarious activity. A key principle here is that the more layers applied to a site, the greater its security.

Why security is important

This may seem obvious, but there's more to it than keeping your own site online. Infected websites compromise the entire server, which may host other sites, which are then vulnerable to attack. On the Web, infected sites can infect visitors' local machines, which in turn spread the virus or payload further into cyberspace. And on it goes, until much data, time, and money has been wasted.

Security is for everyone

On the Web, good security is about protecting those resources under your control. For example, the server administrator is responsible for the security of the server itself, its software, network settings, ports, and so forth. As the administrator of your own site, you are responsible for the security of your database and files. Likewise, any users registered with your site are responsible for using strong passwords and participating according to the rules.

When everyone does their part, security is optimal; otherwise, vulnerabilities emerge to be discovered and exploited. This is one reason why, in the Preparation chapter, shared hosting is considered inferior to private hosting. On a private or virtual private server, your resources are yours and not shared with other accounts. In a shared environment, security is only as strong as the weakest link: if your virtual neighbor's site gets hacked, everything on the server is compromised and vulnerable to attack.

Even so, taking steps to secure your site — regardless of where it's hosted — helps to ensure its existence, integrity, and potential success. A secure site provides a safe environment for visitors to make transactions, upload content, leave comments, and interact in general. People and search engines tend to prefer sites that are safe and secure. When a site gets hacked, Google displays a scary warning message that drives your traffic elsewhere. Insecure sites risk their reputation and rank in the search results. Security provides a solid foundation for a thriving, growing site.

From large corporate and e-commerce sites to small portfolio sites and blogs, security is *mission-critical*. Taking the time to protect the integrity of your resources is well-worth the effort. Every security technique that you apply to your site adds another layer of protection against threats and exploits. And it all begins by staying current with WordPress.





WordPress is secure.

With all of this talk about malicious code and hacked websites, its easy to have some concerns. But don't worry. The previous section is meant to shed light on the importance of good security, which WordPress takes very seriously. When discovered, serious vulnerabilities are immediately patched, and a new, more secure version of WordPress is released.

This is why it's so important to keep WordPress, themes and plugins updated to their current versions. Doing so ensures that you have all the latest improvements, security patches, and bug fixes. Indeed, staying current with WordPress is the first, best thing you can do to keep your site secure.

Security of themes & plugins

The WordPress development team maintains a sharp focus on security, so you can run WordPress with peace of mind. If you're running a default installation of WordPress without any plugins, and using the default theme, your site is *very* secure, even more so if you're running the latest version. But then, if you install a plugin that introduces a vulnerability, all of that tight WP security is for nothing, and your site is no longer secure.

This is why, throughout the book, it's recommended that you choose officially approved plugins and themes from WordPress.org. Themes and plugins not approved by the WP team may or may not be safe, which is why it's important to do your research before installing something from, say, WP-Scorpion.biz.

While there are risks, most plugins by trusted authors are well-coded and perfectly safe. The point here is that plugins and themes should be carefully scrutinized before installation and activation.







性能

The characters 性能 represent performance.



WP Codex guide to optimizing performance (a) https://wp-tao.com/213

Optimizing Performance

Websites should be as fast as possible. When your pages load quickly, your visitors are happy, and happy visitors are the best. How quickly your pages load depends on many factors, including some things you have control over, and some things you don't. For example, if your pages are loading slowly because of limited server resources, there are steps that can help. Conversely, if your pages are slow because of the visitor's internet connection, there's not a lot you can do.

Optimization is all about improving those things that can be improved, such that you've done your part to ensure that your pages load quickly — regardless of external circumstances. Improving the performance of your site helps to:

- Conserve server resources
- Improve visitor experience
- Perform better with search engines
- · Increase traffic and sales
- Improve site reputation

Bottom line: fast sites succeed on the Web. And this chapter shows you how to make your WordPress-powered site blazing fast. Of course, there isn't a magic plugin that will optimize everything. Rather, optimizing performance is like optimizing security: it happens in *layers*. Each new technique that you apply further improves the performance of your site. Some techniques provide bigger payoffs than others, and some are more difficult than others to implement, but the end result is that any optimization steps you've taken work cumulatively to make your site better, faster, and more awesome.

Optimization overview

Before getting into the optimization techniques, let's take a moment to consider some of the broader aspects of site-optimization. For example, it' important to have an understanding of how your site is performing before it's been optimized. Using free online tools, it's possible to check key aspects of site performance, such as load-time, page-size, number of HTTP requests, and more to establish a baseline.

GOOGLE PAGESPEED - https://wp-tao.com/214

PageSpeed provides descriptive, actionable results about site performance.

YAHOO'S YSLOW - https://wp-tao.com/215

YSlow requires installation of browser extension or bookmarklet, but the practical, actionable results are well-worth the effort.

WEBPAGETEST.ORG - https://www.webpagetest.org/

Online tool for checking basic performance of web pages.

UPTRENDS - https://wp-tao.com/798

Test your website speed in major browsers, on desktop and mobile.

GTMETRIX - https://gtmetrix.com/

Online tool that checks your site against both Google's PageSpeed and Yahoo's YSlow performance recommendations.

PINGDOM - https://tools.pingdom.com/

Online tool that checks essential performance aspects of your site.

On their own, these tools can provide a LOT of information that can be overwhelming to the uninitiated. At first, focus on load-times and overall performance scores. Higher scores and lower load-times are the goal of this chapter. As we go through the different techniques, the jargon and data presented for the various online speed tests will begin to make sense.



Google's PageSpeed is just plain awesome.

@ https://wp-tao.com/214



Pingdom's easy-to-use test results make it nice.

@ https://tools.pingdom.com/



Google's homepage @ https://google.com/

Most of the optimization techniques and recommendations are summarized neatly at the following two guides:

Google's "PageSpeed Insights Rules"
(a) https://wp-tao.com/216

Yahoo's "Exceptional Performance" (a) https://wp-tao.com/217

Establish a baseline

To begin, test your site's homepage using Google's PageSpeed and see where it's at performance-wise. Use this score as a relative baseline for your site's performance. That way, as you implement optimization techniques, you can measure and compare the results. After obtaining your baseline score, refresh the PageSpeed tool and run the test again on Google's own home page. The results of that test give us something to aim for, as Google's page performance is about as good as it gets.

Factors to consider

How you go about optimizing your site depends on numerous factors, such as hosting, traffic, and the type and size of your site. Here is a quick overview:

HOSTING

The type of hosting you have determines the amount of control you have over the server. For example, with shared hosting, the host manages the server, which means limited control. Conversely, virtual/dedicated hosting provides control over most if not all aspects of server configuration, providing much control over performance.

TRAFFIC

Traffic plays an important role in deciding how much optimization is necessary. For example, small blogs with light traffic may be fine with existing performance levels, whereas sites with heavier traffic will certainly want to boost performance. While every site will benefit from better performance, in general, the extent of recommended optimization is proportional to the site's volume of traffic.

PURPOSE

The type and size of your site should be kept in mind when optimizing your site. For example, for large e-commerce sites, optimization is mission-critical. Likewise, sites serving up lots of media content will benefit greatly from caching, and text-heavy sites will benefit from compression. In general, most optimization techniques apply to every site, but keeping the type of site in mind will help to make wise decisions.

"You have to learn the rules of the game. And then you have to play better than anyone else."

— ALBERT EINSTEIN



勝

The Chinese character 勝 represents success or victory. May it be yours on the Web.



WP Codex guide to Search Engine Optimization (a) https://wp-tao.com/300

Improving SEO

Ultimately, websites are for *people*. But people can only visit your site if they are aware of its existence. The old saying, "build it and they will come" certainly applies on the Web, but the amount and timing of traffic to your site depends on its online *visibility*. The visibility of your site determines its success, and that's what SEO is all about: increasing the visibility and success of your website.

SEO stands for "Search Engine Optimization", but has evolved to represent much more. Good SEO strives to optimize pages for both search engines and human visitors. They are two sides of the same coin, each connected to the other. The more that search engines like your content, the more it will be displayed in the search results. In turn, the more that visitors like your content, the more it will be shared around the Web via social media services, blog posts, and so on.

Going further, as search engines place more value on well-liked content, your pages will continue to climb in the search results. The process is a self-perpetuating cycle for sites that are well-optimized for search engines and people. In this chapter, we'll see how to optimize for both sides of the SEO coin.

Why SEO is important

SEO is proportional to the success of your website. If you are not concerned with whether or not anyone visits your site, there is no real need for SEO. But most of us are on the Web to succeed — whether it's promoting, sharing, or selling, the more traffic your site receives, the more successful it's going to be. SEO is about maximizing your online presence, reaping as many benefits as possible, and of course making money. SEO is about growth, prosperity, and success on the Web.

First steps to better SEO

SEO advice is abundant on the Web. SEO is like the Wall Street of the Internet: it's where the action is for those wanting to score big, make millions, and take over the world. Seriously, it can be exhausting trying to stay current with the perpetual deluge of SEO info, but doing so keeps your game sharp and ahead of the curve.

So in this chapter on SEO, we're going to keep it simple, efficient, and effective. We'll focus on the fundamentals, applying proven techniques and strategies to improve the performance of our site with visitors, and with the search engines.

As with optimizing performance, the first thing we want to do for SEO is to see where our site is at currently. A baseline for comparison purposes. Here are some excellent free tools for checking the SEO of any site (some may require registration).



Seoptimer – Website review and SEO audit tool
(a) https://www.seoptimer.com/



SiteCheckup – SEO made easy (a) https://seositecheckup.com/

The Reaction Engine

The Reaction Engine – Analyze the SEO for a given keyphrase

(a) https://www.reactionengine.com/



Small SEO Tools – Nice collection of useful SEO tools
(a) https://smallseotools.com/



HubSpot – Generates marketing report for your pages (a) https://website.grader.com/



Site Analyzer - Multi-criteria SEO analysis

(a) https://www.site-analyzer.com/



WebGnomes – Analyzes the SEO performance of your site
(a) https://wp-tao.com/617



WooRank – Website analysis with many great features
(a) https://www.woorank.com/

Premium SEO tools

Once you begin checking your site using these tools, you'll see that there are many, many ways to optimize your site for the search engines. Before continuing, take a few minutes to check your site using one of the free SEO tools. Without worrying about every little detail, keep the general results in mind so you know what to look for as we continue with improving our site's SEO.



"Stop thinking in terms of limitations and start thinking in terms of possibilities."



Customization is written as 定制 in Traditional Chinese.



(*U*S*T*0*M*I*Z*E W*0*R*D*P*R*E*S*S

Customizing WordPress

The act of customizing something makes it uniquely yours. For example, back in high school, I customized my jean jacket with patches, buttons, and artwork. If someone else saw that jacket, they knew it was mine. Likewise with websites, you want to customize it to suit your needs and represent what it's all about.

There are many ways to customize WordPress. WordPress may be customized via settings, themes, plugins, widgets, templates, and more. In this chapter, we're going to jump right in and explain the many different ways and techniques that are available to you for customizing WordPress. Then, in the next chapter, we'll apply our skills and implement some awesome techniques.

What can be customized?

So you've installed WordPress. And it looks just like every other default installation, so you probably want to customize the site and really make it your own. But where to begin? A WordPress-powered site brings a lot to the table, and it can be overwhelming just looking at it all, wondering what can be customized, where to begin, and how to make it happen.

With self-hosted WordPress, you literally have complete control over every aspect of your site. If some aspect of WordPress' default appearance or functionality needs changed, it may be possible to do so via the settings in the Admin Area. If there are no settings available that will make the desired changes, there may be a theme or plugin that will do the job. And if all else fails, you have full control over the theme template itself, meaning you can make your site look and do whatever you want.

To put things into perspective, here is a general overview showing where to begin with your customization efforts.

Method	Things that can be customized	Difficulty
Admin Area & default WordPress settings	Basic functionality such as enabling/disabling comments, the number of posts to display, enabling/disabling registration, implementing permalinks, etc.	Easiest.
Install & configure	Everything under the sun, but some niches/functionality are hit or	Easy to Advanced
themes/plugins	miss. Plus, some plugins may require advanced configuration.	(usually easy)
Configure theme options/widgets	Colors, font-sizes, positioning of sidebars, header images, background images, menus, widgets, colors, fonts, and potentially much more, depending on the theme.	Easy.
Customize theme template files	Page structure (HTML), appearance (CSS), behavior (JavaScript), and dynamic functionality (PHP). Essentially, anything is possible via template customization.	Medium/Advanced (varies with theme)
Edit some WordPress core files	Literally any aspect of WordPress. As a rule, you should never change any core files. People get mad.	Never do this.

Keep in mind that these methods aren't always mutually exclusive. The more customization that needs to be done, the more likely it is that you'll be configuring settings, installing plugins, and customizing your theme files to make it happen. The take-home message here is that there are numerous points of entry for getting in there and customizing WordPress.

Tip: Keep a log of any changes made to your site. A current change log is useful for diagnosing issues should they arise. Version control is another way of doing keeping track of changes (and much more). Check out this recent article to learn more:

@ https://wp-tao.com/354



Stay on the path

When customizing your WordPress-powered site, use its native functionality whenever possible. When default settings won't suffice, see if you can customize what's needed by configuring settings in the Admin Area. Then, if that won't get you there, see if there's a suitable theme or plugin that will do the job. Lastly, if the desired customization isn't possible through any of these methods, it's time to pull out the big guns and edit directly the theme (or child theme) template files.

"Staying on the path" is all about following this organic strategy when customizing WordPress. Using native settings and functionality to make changes keeps things manageable going forward. Over the years, WordPress has evolved to the point where most, if not all, required customization can be implemented without touching any code. This enables you to make changes quickly and predictably, while ensuring hassle-free updates and easier maintenance in the future.

With that in mind, let's get into the different ways to customize WordPress. The information contained in the next sections equip you with the knowledge needed to implement just about any technique. We'll then apply theses methods in the next chapter with some popular and practical customization techniques.

Customize via plugin

As we've seen in the chapter on Plugins, there is a WordPress plugin for just about everything. Using a plugin to customize WordPress enables you to keep things modular and extensible.

For example, rather than hard-coding a shopping cart into your theme, using a good e-commerce plugin means that somebody else has already done the work, so you can get up and running in less time. Then, if later you decide that a shopping cart





The Chinese characters 長壽 represent long life, or longevity. May you have it abundance.



Implementing new techniques goes more smoothly with your favorite beverage.

Techniques

With a solid understanding of WordPress under the belt, it's time to look at some practical techniques for customizing your WordPress-powered site. There are literally thousands of great customization techniques on the Web, but some are more practical and popular than others. This chapter rounds up some of the most frequently implemented modifications, plugins, tricks, and tips.

As you read through the chapter, each technique may or may not be useful for you, however, following along will prove a useful exercise in furthering your understanding of how WordPress works. If anything, some of these techniques will spark new ideas for your own site. If you think of a technique that isn't covered in the book, search the Web to see if there are any good resources, tutorials, or plugins. As we've seen, there's a plugin for just about everything, and for everything else there's a custom function, plugin, or technique that will do the job. In most cases, it's just a matter of locating those who have "already been there and done that."

Each of the techniques and plugins in this chapter includes a concise description and walkthrough of the essential steps. Staying on the path of WordPress, each technique strives to use existing functionality and as touch as little code as possible. When modifications to the theme template or other files are required, remember to make a backup copy before making any changes. Doing so makes it possible to "roll back" to original condition should something go awry. Also, whenever possible, we'll refer to the *Tao of WordPress* theme to explain steps in the various techniques.¹

^{1.} Log in to the Members Area to download the 'Tao of WordPress' theme (and child theme).

Integrate social media

As we've seen in the chapter on SEO, social media plays an important role in the success and longevity of any website. Fortunately, there are literally thousands of great plugins for integrating social media with WordPress. To help navigate the ocean of possibilities, here is a hand-picked guide to the best of the best social media plugins for WordPress.

Social media sharing

Make it easy for visitors to share your content by adding a set of "share" buttons on your posts, pages, sidebar, and anywhere else. Here the best plugins that I've found for doing so. They are all top rated and provide excellent features.

SOCIAL MEDIA FEATHER - https://wp-tao.com/400

Social Media Feather provides a lightweight set of social-media buttons that can be displayed on all Posts, Pages, and Custom Post Types. The buttons link to your specified social-media profiles, making it easy for your guests to share content and follow your activity. Features include sharing widgets and shortcodes to further expose your social-media presence. As a bonus, you can disable buttons on any post via Custom Field.

SOCIAL SHARE ICONS & BUTTONS - https://wp-tao.com/401

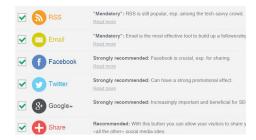
Displays social-media sharing icons and buttons on your website with just a few clicks. Supports numerous social media platforms and provides several placement options for displaying your icons almost anywhere. Lots of great features and a top-rated plugin.

SIMPLE SHARE BUTTONS ADDER - https://wp-tao.com/402

This is a simple, clean, lightweight plugin that displays share buttons on all of your posts and/or pages. Features enable you to customize location, text, icons, and more. Simple, elegant, and effective. I'm thinking that "adder" refers to an action rather the snake.



Sociable Media Feather delivers a clean set of social-media "share" and "follow" buttons.



Social Share Icons & Buttons makes it easy to display customized social sharing icons.

Hello world!

Welcome to WordPress. This is your first post. Edit or delete it, then start blogging!















Simple Share Buttons Adder is clean & focused.

ULTIMATE SOCIAL MEDIA AND SHARE ICONS - https://wp-tao.com/651

Ultimate Social Media and Share Icons makes it easy to display icons for feeds, email, Twitter, Google+, Facebook, LinkedIn, YouTube, and around 200 other popular services. Includes many great features like multiple actions, animations, click-counts, pop-ups, and custom icon uploads, so you can choose your own flavors.

SIMPLE SOCIAL MEDIA SHARE BUTTONS - https://wp-tao.com/403

Simple Social Media Share Buttons displays an advanced set of social-media sharing buttons almost anywhere on your site. Supports many social services such as Facebook, WhatsApp, Viber, Twitter, Reddit, LinkedIn, Pinterest, and more. Provides lots of great options to configure the perfect set of social icons.

For more social media sharing plugins and tools, check out the article, Social Media Plugins for WordPress at Smashing Magazine's WordPress section.¹

Twitter

Twitter is the place to share your content in real-time, get instant feedback, and connect with others. Integrating Twitter with your site involves techniques such as auto-tweeting your posts, including tweets in post comments, and displaying your recent tweets in the sidebar. To do so, here are three plugins worth checking out.

TWITTER - https://wp-tao.com/405

Twitter is the official WordPress plugin made by Twitter. It claims to "embed Twitter content, improve sharing on Twitter, convert your web audience into Twitter or Periscope subscribers" and more. Sounds good but it's getting a lot of bad reviews.

CUSTOM TWITTER FEEDS – https://wp-tao.com/406

Custom Twitter Feeds displays any Twitter feed(s) on your WordPress-powered site. Displayed feeds are responsive and well-formatted, so they are readable on any device and easily crawled by search engines. The plugin has excellent user reviews and provides "tons" of useful options for fine-grained control.



1. Social Media Plugins for WordPress(a) https://wp-tao.com/404



謝謝

The phrase "Xièxiè" means "thank you" and is written as 謝謝 in Chinese.



"Make tea, not war." — Monty Python

Tips & Tricks

As a way of saying "thank you" to everyone who purchases *The Tao of WordPress*, here is an exclusive bonus chapter with more useful tips and tricks for customizing your WordPress-powered site. This chapter draws upon the principles and techniques covered in previous chapters and applies them to the art of customizing WordPress via theme templates, shortcodes, and jQuery. Using a minimal amount of code, it's possible to add new functionality and fine-tune the look and feel of your site.

In general, implementing changes to your site is best achieved using plugins. It's easy to find good plugins for general stuff like sitemaps and contact forms, but not so much for site-specific details such as changing the width of posts or adding a second loop. These sorts of case-specific modifications are best handled at the theme level, where targeted customization may be executed precisely and efficiently. This chapter presents some practical customization techniques that demonstrate the ease with which changes can be made via theme template files. Additionally, this chapter contains some tips and tricks for working with media files, post revisions, post locking, autosave, and the jQuery JavaScript library.

Tao of WordPress Theme

There are gazillions of themes out there, so rather than try to generalize and complicate things, we'll use the *Tao of WordPress* theme (and its child theme)¹ to keep the techniques as focused and simple as possible. For each technique, the code will work with any WordPress-powered site, but the implementation may vary depending on the theme. And with that said, it's time for some tips and tricks.

^{1.} Log in to the Members Area to download the 'Tao of WordPress' theme (and child theme).

Add a logo to the header

As explained in the section on <u>custom headers</u>, supportive themes enable users to change the header background image directly from the Admin Area. It works great, but what about adding a second image, say a logo, to the header? Here are the steps to do so using the *Tao of WP* child theme as an example.

Step 1: Upload your header logo to the child-theme's /img/ directory on the server. Note: create the /img/ directory if necessary.

Step 2: Copy the parent theme's header.php file to the child theme.

Step 3: Add the following image markup just before the <hgroup> in the child theme's header.php file:

```
<img src="/wp-content/themes/wptao-child/img/wptao-logo.png"
class="header-logo" alt="">
```

Then change the value of the src attribute with the path to your image file, and upload the modified header.php file to the server.

Step 4: Open the child theme's style.css file and add the following lines of CSS:

```
body .header-logo { float: left; width: 150px; height: auto; }
body header#page-header hgroup { float: left; }
body header#page-header nav { clear: both; }
```

After uploading the child style.css file to the server, revisit your site and refresh the page to make sure the new style.css file is loaded by the browser. If all went according to plan, your logo should be displayed to the left of your site's title and tagline. Note that it may be necessary to include some additional CSS rules to position and style the image as desired. See the sidebar for a quick example.



HOME BLOG SHOP TOUR

Screenshot showing the default appearance of the child theme's header area.

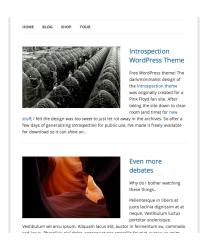


After completing step 4, the logo is displayed, but it's too close to the top of the page. So we can add "margin-top: 10px;" (without the quotes) to the .header-logo class. After doing so, the header looks like this:





Like other themes, the 'Tao of WP' theme displays featured images above the title of each post, which looks good, but there are ways to customize their size and position.



After applying a snippet of CSS, the featured images are floated left and given a healthy right margin to keep things looking sharp.

Customize featured images

Supportive themes enable you to <u>set featured images</u> (aka post thumbnails) for your posts and pages. This is great, however it's often necessary to customize how and where the featured images are displayed. For example, the Tao theme displays featured images *above* the title of each post, as shown in the sidebar (top-left). To change it up, let's decrease the size of the images, float them left, and add some margin. We could do it easily with this bit of CSS:

```
body div#content article div.featured-image {
  float: left; max-width: 60%; margin-right: 30px;
}
```

Adding this snippet to the child theme's style.css, the featured images will be displayed as shown in the lower-left screenshot. Going further, we could optimize performance by serving smaller images instead of resizing them with CSS.

Featured images are stored in the <u>Media Library</u> and sized according to the options chosen in your <u>Media Settings</u>. There you may specify three sizes for each uploaded image: thumbnail, medium, and large. Additional sizes may be specified by adding the following snippet to the theme's functions.php file:

```
set_post_thumbnail_size('144', '144', true); // true = crop
add_image_size('wptao-324', 324, 324, true);
add_image_size('wptao-450', 99999, 450, false);
```

This snippet defines the default size for post thumbnails, and then defines two more custom sizes. You can define as many custom sizes as necessary with additional instances of add_image_size(). You can then select and insert custom-size images from the dropdown menu on the Insert Media screen.

Continue the journey...

Get the book @ https://wp-tao.com/