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THE ULTIMATE GUIDE TO WORDPRESS OVERSIGHT:

Tracking, logging, and
securing your site

MELAPRESS BOOKS FOR SAVVY WORDPRESS USERS

CONTENT

- 05.....WHAT IS WORDPRESS OVERSIGHT?
- 07.....WHY WORDPRESS OVERSIGHT IS IMPORTANT
- 16....WHO CAN BENEFIT FROM WORDPRESS OVERSIGHT?
- 22.....HOW WORDPRESS ACTIVITY LOGGING WORKS
- 33.....WHICH EVENTS TO TRACK AND LOG
- 35.....INFRASTRUCTURE REQUIREMENTS
- 39.....START LOGGING WORDPRESS ACTIVITY NOW
- 39.....WHY CHOOSE WP ACTIVITY LOG
- 40.....INSTALLING WP ACTIVITY LOG

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THE AUTHOR



WP ACTIVITY LOG

Make the most out of this e-book; download WP Activity Log and experience firsthand the power of WordPress oversight.

[Get WP Activity Log](#)

PREFACE

Oversight is a queasy word. It can mean either to oversee or to overlook, which are complete opposites of each other (even though ‘see’ and ‘look’ are synonyms, not antonyms). However, in a perhaps ironic twist of fate, it is easy to overlook the things you do not oversee.

Oversight, that is, to oversee, is an important, if not critical, process of good governance. Without oversight, it can be difficult to understand what is working and what isn’t. And, as Peter Drucker famously said, (only) what gets measured gets managed.

Things have a habit of descending into chaos. The second law of thermodynamics confirms this. Without oversight, then, processes also descend into chaos, prohibiting growth and allowing risks to fester into issues.

The 2nd law of thermodynamics was first formulated by the great Lord Kelvin. Rudolf Clausius added the concept of entropy in 1850, which states that in a closed system, entropy (a fancy word for chaos) increases but never decreases. This is why you can never unboil an egg. It is represented by the following formula:

$$\Delta S_{univ} > 0$$

Chaos and issues are generally best avoided - making oversight critical to the sustainability and longevity of any process, including those associated with WordPress websites.

In this short ebook, we will be taking a look at WordPress oversight - what it is, why it’s important, how it can help you, and lastly, how to implement it; addressing common concerns and pitfalls along the way.

WHAT IS WORDPRESS OVERSIGHT?

WordPress needs different resources (such as server resources, web server, database, and bandwidth) and processes (such as content uploads and management and user access) to function. Through oversight, we can monitor these very resources and processes, ensuring they do not break down.

From a technical WordPress perspective, oversight includes tracking and logging events related to interactions between processes and resources.

Logging gets something of a bad rep - many associate it with unreadable text files that only someone who's been working on computers since the 80s can possibly understand. You'll be glad to know that logs have improved drastically over the years and have become very user-friendly - and useful even to non-technical users.

Tracking can help you both manage and secure your website and resources, be it users, customers, employees, or content - and improve it.

The different types of WordPress tracking and logging

Because websites can become technological and operational behemoths, you'll find different tracking and logging solutions to accommodate different tasks and goals. In an era where competition is harsh - whether competing for dollars, attention, or anything else - numbers matter. And there is no shortage of solutions to help you find the right numbers.

MARKETING

Marketing tracking is perhaps the most popular form of tracking. Google Analytics, GA for short, is something of a gold standard in this department. It provides administrators and marketers with invaluable insights into their website visitors, SEO, and other marketing efforts.

UX

UX tracking allows us to track how users and visitors behave on our website. Solutions like CrazyEgg, Hotjar, and many others fall within this category. UX tracking provides insight that can help marketers optimize websites in pursuit of a goal, such as increasing sales.

SECURITY

Security logging can happen at the infrastructure level (the infrastructure on which WordPress is built) and WordPress level. At the infrastructure level, we have firewall logs, Intrusion Detection System (IDS) logs, server access tracking, and logging. At the WordPress level, we have activity tracking and WAF (Website Application Firewall) logging. WordPress activity logging includes logins and logouts, resource access, and account changes.

DEVELOPMENT

Development logging is used by developers (and some administrators) to track technical issues. WP_DEBUG is a tool that's built into WordPress that offers the ability to log PHP errors, warnings, and notices. As WordPress is built with PHP, this tool can tell us what issues WordPress is struggling with.

TECHNICAL

Technical tracking includes keeping logs of website uptime, performance, 404s, redirects, and other metrics that can affect the performance of a WordPress website. Here, you'll find tools such as Google Search Console and plugins/services such as WP Umbrella.

OPERATIONAL

Operational tracking allows administrators and website owners to get a clear picture of what happens on their WordPress website. It includes logging changes to resources such as posts and pages, as well as 3rd party plugin resources such as forms, products, and categories.

WHY WORDPRESS OVERSIGHT IS IMPORTANT

Today, running any website that aims to attract and retain visitors without the use of analytics is simply unheard of. While analytics is a form of oversight, WordPress oversight extends beyond marketing.

Just as it's important to ensure a healthy stream of visitors to your website, it is equally important to ensure that the right content is being served. For example, should know it has not been adulterated in any way, and that there's no untoward activity such as fraud attempts or security breaches that may deface or take down your website.

Security

Recent events have shown us that security needs to be taken very seriously. In 2023, Cloudflare reported the largest DDoS attack in its history, reaching 201,000,000 requests per second.

For attackers to manage an attack of this scale, they compromise third-party systems to send these requests to their primary victim. In their pursuit to recruit as many victims as possible, attackers target systems en masse - with many WordPress websites often finding themselves caught in the net.

Cyber attacks are on the rise - and while this may sound alarmist, bordering on fear-mongering, a mere look at the news headlines will tell you this much.

In most cases, bad actors are not after your website specifically, but rather, they carry out attacks en masse, akin to casting a wide fishing net. Your website can very easily get caught in the crossfire - often at great expense.

The silver lining here is that you don't need to invest in some ultra-sophisticated technologies to protect yourself. Following basic best practices will go a long way in keeping your website safe.

Logging events is one such best practice. You can easily keep a log of user logins, including their IP, the date and time, and other relevant information. Access to resources, such as who edited which page and what changes were made, also plays an important role in helping you stay secure.

Sure, logging is not a magic bullet that's going to protect you from attacks - no single system is going to. However, having access records goes a long way in identifying security and privilege breaches - which often go unnoticed.

01 CASE STUDY

All software can come with security vulnerabilities. Whether it's your laptop's Operating System, smart light applications, WordPress, plugins, and themes. Developers release updates to address these security vulnerabilities (and add new features). However, such bugs can be present for some time before they are reported and fixed, which can leave systems open to attacks - even if this is for a short period of time.

Vulnerabilities come in all shapes and sizes. Some might allow bad actors to steal data or execute code remotely. Others may allow user accounts to perform unauthorized actions.

Think of activity logs as a forensic tool that can uncover what is happening under the hood and provide us with context and information when something does happen.

We will be using [WP Activity Log](#) to track how this might play out.

In the below activity log screenshot (**FIG 1.**), we can see user Marie Curie, who has a Subscriber role, published a post. Now, we know for a fact that Subscribers cannot publish posts.

☐	ID ↕	Severity ↕	Date ↕	User ↕	IP ↕	Message ↕	
☐	2001		July 10, 2024 12:44:32.000 pm	 Marie Curie Subscriber	91.90.123.187	Published the post Top tips for better WordPress security. Post ID: 75 Post type: post Post status: published View the post in editor URL	More details...

FIG 1.

We can investigate this further by clicking on the **More Details** button, which opens the inspector. Here, we'll see all data and metadata related to the event, which allows us to understand what happened and take the appropriate action.

While the activity log will not tell us what is responsible for the security breach, it will alert us of the issue and provide us with enough information to do preliminary investigations.

For example, if we are not familiar with the user, we can check when the user account was created and their first login. We can also check all activities undertaken by that user account to essentially create a paper trail of everything they have done. All this information gives us a clearer picture of what happened and when, putting our investigations well ahead of where they would have been without a log.

USER ACCOUNTABILITY

Users make mistakes; sometimes inadvertently, other times not so much. If you're not tracking and logging user activities, finding out who is responsible can be a very difficult task should there be an incident. In the case of data theft, with no record of who accessed what and when, you won't know what happened or how it happened.

User accountability is not about pointing fingers, although in some cases, this might be warranted. Rather, it's about ensuring that users take responsibility for their actions and understand the implications of the tasks they carry out on your website.

It can also help you develop new processes or alter existing ones to ensure a more efficient workflow - helping users and your site perform better.

One of the things that WordPress agencies and administrators of large WordPress websites often struggle with is keeping tabs on all the changes taking place on their websites. A customer updating a page only to break the website or a team member making a change that has not been duly authorized can have organizational and sometimes commercial implications.

Installing [WP Activity Log](#) immediately starts tracking all user actions, including actions related to popular 3rd party plugins such as WooCommerce, MemberPress, and many others.

CASE STUDY

Agencies tasked with managing WordPress websites on behalf of their clients are often responsible for the security and management of these websites. With many people in different roles having access, it can be difficult to hold users responsible for the things they do.

While policing users is not an agency's job (unless you're the Central Intelligence Agency), having an activity log solution can save you a lot of trouble and grief. It encourages users to take ownership and enables administrators to hold users accountable should the need arise.

WP Activity Log can help you avoid endless whodunnits, providing indisputable logs detailing who has done what.

☐	ID ↕	Severity ↕	Date ↕	User ↕	IP ↕	Message ↕
☐	2065		July 10, 2024 12:56:39.000 pm	 Joel Barbara Administrator	58.144.76.189	Modified the content of the post. Post ID: 75 Post type: post Post status: published View the content changes View the post in editor URL

FIG 2.

They also help you demonstrate that the promised work has been carried out. Here, you can even automate scheduled reports to inform clients about completed tasks.

For more information on reports see [page 34](#).

TROUBLESHOOTING

Systems break down; this is an indisputable fact. While proper, consistent maintenance lowers the risk of incidents, the risk remains. Some issues are easy to troubleshoot and fix, while others can feel like a Dan Brown novel (just ask anyone who has ever worked in IT).

The issues that are hard to troubleshoot can prove to be especially stressful to the business and the administrators who need to resolve them. Downtime can be especially costly to businesses that depend on their website to generate income. Having a faster way to identify the cause can greatly contribute to a faster resolution.

Logs are especially useful in identifying causes. Typically, the last entries in the log will give you a strong indication of what the issue might be. A user might have deleted an important file, or a plugin update caused a misunderstanding, leading the website to go down. By referring to the log, you can start to understand what happened before the issue appeared, allowing for faster resolutions and less downtime.

CASE STUDY

Updates can be something of a double-edged sword, especially in highly customized environments. To mitigate the risks of an update breaking their website, many administrators opt to test updates in a staging environment first. Once testing has been completed, updates can then be rolled out to the live websites.

Some administrators, however, would rather roll out updates as soon as they become available. To this end, WordPress offers automatic updates, which install updates as soon as they become available without requiring human intervention.

Turning this setting on or off without proper control can lead to issues. In environments where updates are tested before they are rolled out, switching automatic updates on can lead to custom software breaking for seemingly no reason. In environments where auto-updates are enabled, disabling the setting means no new updates are installed for potentially a long time - which can lead to security breaches.

[WP Activity Log](#) records changes in settings, such as switching automatic updates on or off.

☐ 6044		April 5, 2024 11:37:44.000 am	 Joel Barbara Administrator	58.144.76.189	Changed the Automatic updates setting. New setting status: automatically update maintenance and security releases only
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FIG 3.

Should something break, the log can help you troubleshoot issues.

A quick log search tells us which settings have been changed and by whom, providing insights into what might have gone wrong for faster troubleshooting.

FRAUD PREVENTION

E-commerce fraud is increasing at an alarming rate. A Mastercard report¹ on this topic informs that in 2022, global e-commerce fraud reached \$41 million, jumping to \$48 billion in 2023. Such an astronomical jump (I had to check the figures 10 times) leads to more merchants being affected.

Many WordPress e-commerce website owners struggle with fraud. The direct and indirect expenses associated with fraud can be high, including financial and reputational damage.

Fraud prevention can take many forms, depending on the industry you are operating in. A 2020 EY report², however, lists data analytics as one of the top tools in audit fraud testing.

Fraud prevention is a vast topic, and you'll find many tools to help you in this regard. Logs are certainly one of them - being one of the very first tools administrators ever used to get a picture of what actually happened.

A WordPress audit log collects data that can help you identify fraud. Thanks to WP Activity Log's out-of-the-box integration with WooCommerce, this is easier than it sounds.

Let us examine this with an actual real-life example.

Names and details have been changed to protect the guilty.

Fraudsters can be very creative when looking for ways to defraud companies. One tactic is to change the delivery address after an order has been shipped and then claim the order was never received, blaming the vendor for having sent the order to the wrong address.

Let's see how WP Activity Log can help us uncover such a scheme.

 CASE STUDY

1. <https://b2b.mastercard.com/news-and-insights/blog/ecommerce-fraud-trends-and-statistics-merchants-need-to-know-in-2024/>
2. https://www.ey.com/en_us/insights/assurance/preventing-and-detecting-fraud-how-to-strengthen-the-roles-of-companies-auditors-and-regulators

In the first activity log screenshot, we can see that customer Jane Doe checked out her WooCommerce cart, with the date showing as July 11th, 2024.

☐ 2101		July 11, 2024 6:59:50.000 am	 Jane Doe Customer	91.90.123.185	Viewed the post Checkout. Post ID: 24 Post type: page Post status: published URL
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FIG 4.

In the second screenshot, we see the same customer changes her shipping address to a different address than the one she originally had. This was done after the order had shipped out.

☐ 9084		July 16, 2024 11:00:25.000 am	 Jane Doe Customer	91.90.123.185	Changed the shipping address details of the user janedoe Role: customer Previous shipping address: Jane Doe, NL, Apt 6, Building 7, Amsterdam, 1011 BA New Shipping address: Jane Doe, NL, Apt 8, Building 4, Amsterdam, 1013 BA User profile page
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FIG 5.

The customer waited a few days before opening a complaint that she never received the order. Without logs, the 'error' would be self-evident - something went astray during dispatch, and the wrong address was printed on the shipping label. After all, the shipping address on the customer file is different than the one the shipment was sent to.

It is only with logs that we can see that the customer changed her shipping address after the order was sent out.

COMPLIANCE

Falling foul of legislation such as GDPR and standards like PCI DSS can put your website and business in great jeopardy. From operation restrictions to very hefty fines, compliance issues are fraught with legal complications that are best avoided.

Compliance can be very complex as requirements often depend on factors that may or may not be clear. Some requirements, however, are crystal clear, especially when it comes to security. Two-factor authentication is one such requirement. Logging is, more often than not, another must-have.

Logging lets us know exactly who did what and when, creating something akin to a chain of custody. If anything goes missing or data is altered, we can tell what happened with pinpoint accuracy.

Do keep in mind that certain provisions need to be made, such as informing the user about what data is being collected. Logs, however, will help you ensure that you can vtrace activities should there be an incident or a breach.

Article 30 of the GDPR stipulates that “Each controller and, where applicable, the controller’s representative, shall maintain a record of processing activities under its responsibility.” As such, having a record of which data was accessed and by whom helps you achieve GDPR compliance.

Changes to user accounts are recorded whether these are done by the user themself:

 CASE STUDY

☐ ID	Severity	Date	User	IP	Message
☐ 9083		July 13, 2024 6:58:46.000 am	 Jane Doe Customer	91.90.123.185	Changed billing address details of the user janedoe Role: customer Previous billing address: Jane Doe, NL, Apt 6, Building 7, Amsterdam, 1011 BA New Billing address: Jane Doe, NL, Apt 2, Building 15, Amsterdam, 1019 BA User profile page

FIG 6.

Or another user:

☐ ID ↕	Severity ↕	Date ↕	User ↕	IP ↕	Message ↕
☐ 9083		July 11, 2024 7:04:38.000 am	 Lucian Administrator	172.16.53.26	Changed billing address details of the user janedoe Role: customer Previous billing address: Jane Doe, NL, Apt 2, Building 15, Amsterdam, 1011 BA New Billing address: Jane Doe, NL, Apt 6, Building 7, Amsterdam, 1019 BA User profile page

FIG 7.

While GDPR can be complex, access records help you ensure data integrity. Should there be a breach or a leak, access records can also help you with your investigation and any subsequent resolutions that may be necessary.

WHO CAN BENEFIT FROM WORDPRESS OVERSIGHT?

Logs provide critical data about the system and its users. As such, anyone involved in managing a WordPress website can benefit from oversight. Of course, not everyone will obtain the same benefits, so what does WordPress oversight offer different roles?

SYSTEM ADMINISTRATORS

Being the function responsible for the technical aspects of WordPress websites, systems administrators have a lot on their plate. Tasks typically include provisioning user accounts, the security and general administration of WordPress, and everything in between.

Systems administrators will typically want to keep records of:

- WordPress, plugin, and theme installations, uninstallations, and updates
- Resource access and changes
- Logins, logouts, and failed login attempts

Because activity logs can help system administrators diagnose problems and issues, these logs tend to go a long way in improving the efficiency and efficacy of administrators.

Systems administrators tasked with managing WordPress websites need to keep an eye on a lot of things. With the typical website being a hub of busy activity, it can be very easy to miss important changes and updates.

Among many things, administrators need to monitor user accounts, which offer varying access levels to the WordPress site. New unsanctioned accounts that fly under the radar can have devastating repercussions, especially accounts with elevated permissions, such as admin accounts.

CASE STUDY

☐	ID	Severity	Date	User	IP	Message
☐	4001		July 11, 2024 7:22:15.000 am	Lucian Administrator	17.216.53.26	Created the new user: supersecretadmin . Role: administrator First name: Last name: User profile page

FIG 8.

It is perhaps equally important to understand how user accounts behave, including failed logins (for WordPress and non-WordPress accounts), session terminations, blocked logins, and other such activities. Through monitoring, administrators can gain a deeper understanding of user behaviors and risks before they become issues.

☐	1003		July 11, 2024 7:23:33.000 am	Unknown User	91.90.123.185	Failed login attempt with username joel.
☐	1002		July 11, 2024 7:23:10.000 am	Joel Barbara Administrator	91.90.123.185	1 failed login(s).

FIG 9.

AGENCIES

Agencies often share responsibility for their clients' websites - managing everything from updates to content uploads. When properly managed, this collaboration leads to great things. However, without the proper oversight, such collaborations can descend into chaos as updates and changes are made without a clear log of who did what.

WordPress oversight, then, can help in dispute resolution, providing a clear and undisputable log of events. However, it can also help in matters such as billing, providing benefits that go beyond the technical.



Agencies contracted to do certain works for customers can easily demonstrate that the works they are contracted for have been completed. Through [WP Activity Log](#), you can easily identify which works have been done and when; offering irrefutable proof that contractual obligations have been met.

☐ 1002



July 11, 2024
7:23:10.000 am



Joel Barbara
Administrator

58.144.76.189

Updated WordPress.
Previous version: 6.5.3
New version: 6.5.5

FIG 10.

Thanks to the plugin's comprehensiveness, you'll just as easily be able to tell who made the changes, so any mishaps resulting from well-intentioned changes can be quickly addressed without unnecessary finger-pointing.

WEBSITE OWNERS

Website owners, entrepreneurs, and solopreneurs all depend on their websites to help them with various aspects of their business operations. Websites, therefore, are essential, if not critical, assets that need to be maintained and protected to ensure they continue to deliver the many advantages that they do.

Because WP Activity Log can accommodate any website size, you can ensure that it'll continue to be by your side as you grow and expand. Its ability to log many different activities also means that it functions equally well in different scenarios.

Let's look at what website owners of different types of websites can gain from WP Activity Log.

BLOGS

Content represents the meat and potatoes of blog websites. It is an asset as much as it is part of the website's brand, making it a crucial monitoring subject. Blog owners need to know when content is uploaded, modified, or deleted and what has actually changed. Keeping a record is also good practice in its own right. It can provide very useful data in ensuring consistency and critical metrics.

Thanks to WP Activity Log's comprehensive logs, you can easily see the date and time when content has been published.

 CASE STUDY

☐ 2001		May 8, 2024 11:25:40.000 am	 Joel Barbara Administrator	58.144.76.189	Published the post Top 10 WordPress security tips. Post ID: 18 Post type: post Post status: published View the post in editor URL
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FIG 11.

If any amendments are done at any point after this, you will just as easily be able to confirm who made what changes and when, ensuring everything stays above board at all times.

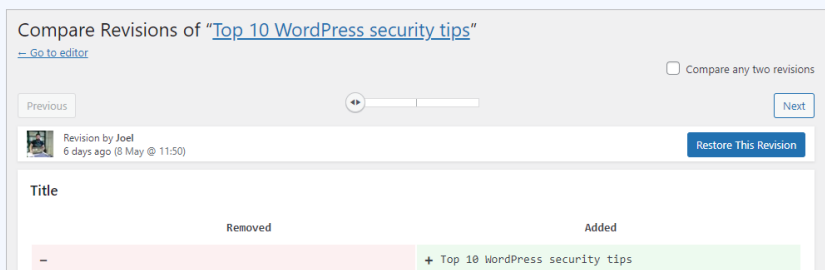


FIG 12.

E-COMMERCE

Thanks to its native WooCommerce support, [WP Activity Log](#) can keep track of a plethora of WooCommerce activities, including changes to:

- Orders
- Categories
- Coupons
- Products
- Store

And much more.

This not only makes it easier than ever before to uncover fraud attempts, whether they're internal or external but also helps you ensure the integrity of your WooCommerce store at all times.

WP Activity Log also makes it easy to understand what changes were done right through the Log Viewer by displaying the new and previous values.

So, if, for example, a user updates the discount code of a coupon, you will be able to see what the value was before the change and what it was changed to. This makes it much easier to determine whether any particular change was authorized, and take remedial action much faster if required.

☐ 9065		July 10, 2024 1:12:27.000 pm	 Joel Barbara Administrator	58.144.76.189	Changed the Coupon amount in the coupon COUPON1 to 30 . Coupon ID: 79 Coupon status: publish Previous amount: 10 View coupon in editor
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FIG 13.

E-LEARNING

Keeping a log of logins, logouts, and failed login attempts can provide a clear and useful picture of user behavior. It can uncover violations such as account sharing, which on many e-learning platforms is a breach of contract.

WP Activity Log not only keeps a log of user logins but also understands if a user logging in already has an active session. This level of granularity makes it very easy to monitor against things like account sharing.

☐ 1005		July 10, 2024 11:35:52.000 am	 Albert Camus Editor	91.90.123.187	User logged in however there are other session(s) already for this user. IP address(es): 213.122.85.58
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FIG 14.

Of course, this information can also be used to assess student attendance, which is made easier thanks to the extensive report capabilities that this plugin offers (more on this later).

It is also worth noting that WP Activity Log comes with a User Session Management module, which enables you to enact policies that limit instances of account sharing, among other things.

Do you want to allow two or more people to login simultaneously with the same username?

By allowing multiple sessions two or more people can login to WordPress using the same username. By blocking them, once a person is logged in with a username, if another person tries to login with the same username they will be blocked.

Multiple Sessions

- ☒ Allow one session only
- ☐ Allow one session only and override current session
- ☐ Allow up to sessions and block the rest

FIG 15.

HOW WORDPRESS ACTIVITY LOGGING WORKS

WordPress does not log activities straight out of the box. While it does offer error logging, to log user and system activities you need [WP Activity Log](#) - the most comprehensive and detailed WordPress activity log plugin.

While it does offer error logging, to log user and system activities you need a plugin like WP Activity Log. This plugin, which is developed by Melapress, is a great choice as it's the most comprehensive and detailed WordPress activity log plugin.

But what is the difference between activity and error logging?

ACTIVITY VS ERROR LOGGING

When referencing WordPress logging, many tend to think of debug logging - and with good reason. Debug logging is the only form of logging that's included with WordPress out of the box.

Debug logging, however, is very different than activity logging.

Debug logging is done through a WordPress tool called WP_DEBUG. This tool logs PHP errors, which allows developers and technical system administrators to troubleshoot WordPress PHP issues. Such logs keep a record of technical coding issues such as missing semicolons, undeclared classes, etc. This makes them useful for troubleshooting coding issues - but not much else.

On the other hand, if you want to keep a record of logins, logouts, changes, and updates, you need a WordPress activity log.

Activity logging and error logging are two completely different tools, both of which have their uses.

Let us now look at activity logging in-depth, starting with the difference between user and system activities.

USER VS SYSTEM ACTIVITIES

Keep in mind that it's not only users that are making changes - system processes, whether initiated by WordPress itself or 3rd party plugins, are also making changes to your WordPress site. Differentiating between the two is important for various reasons.

For example, we'll want to know whether an update was actioned by the system (as would be the case when auto-updates are enabled) or by an administrator of the website. If such an update were to break the site, we'll know whether we need to ask the administrator whether the update was tested or if we need to adjust the updates policy.

☐ ID ↕	Severity ↕	Date ↕	User ↕	IP ↕	Message ↕
☐ 5004		July 11, 2024 7:24:24.000 am	 Joel Barbara Administrator	58.144.76.189	Updated the plugin WooPayments. Updated version: 7.9.0 Install location: woocommerce-payments Previous version: 7.8.1

FIG 16.

HOW ACTIVITY DATA IS COLLECTED

WordPress has no activity logging functionality out of the box. This means you need a WordPress plugin like [WP Activity Log](#) to track and log WordPress activity on your website. The plugin does not uncover any logs hidden in the database - it's the one doing all the work. It uses its own sensors to detect whenever activities take place and log them accordingly. This is why best practices recommend installing an activity log plugin as soon as possible.

You can choose which events are logged and which ones aren't, as well as where the log data is stored (more on this later).

Aside from native WordPress events, WP Activity Log also integrates with several third-party plugins, logging events that are specific to such plugins. There's also an API that enables you to easily develop your own sensor to log any other event that's not currently supported by the plugin.

Through these mechanisms, you can ensure that no user or system event flies under the radar.

ACTIVITIES WP ACTIVITY LOG TRACKS

WP Activity Log is by far the most comprehensive WordPress activity log plugin available. It boasts [an ever-growing library of activities it can log](#), and new ones are added regularly.

So, what can WP Activity Log keep track of? Let's find out.

Categories

Categories are a WordPress taxonomy used to organize content. In content-intensive implementations, they provide critical navigation structures for users and visitors. Categories are typically customized to suit the content of the WordPress website it is hosted on.

Content-intensive WordPress sites such as blogs and educational websites may depend on categories to organize their extensive collection of content - making any changes to categories noteworthy.

☐ 2128		July 10, 2024 1:12:27.000 pm	 Joel Barbara Administrator	91.90.123.187	Changed the slug of the category Blog to blog . Previous slug: news View category
☐ 2127		July 10, 2024 1:12:19.000 pm	 Joel Barbara Administrator	91.90.123.187	Renamed the category News to Blog . Slug: blog View category

FIG 17.

Comments

Comments are a native WordPress feature that enables visitors and users to engage with the website’s content. Aside from the potential to offer a sense of community, it can also help with SEO efforts. Unfortunately, comments are also susceptible to spam.

Comment oversight can ensure that effective comment moderation is taking place - ensuring spam gets duly deleted while genuine comments are published and replied to when necessary.

☐ 2091		July 10, 2024 12:58:54.000 pm	 Joel Barbara Administrator	58.144.76.189	Unapproved the comment posted by A WordPress Commenter on the post How to add CAPTCHA to WordPress . Post ID: 1 Post type: post Post status: published Comment ID: 1 Comment URL
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FIG 18.

Custom fields

Custom fields enable you to add metadata to posts. As this metadata can be used to automate actions, custom fields can play a critical role in content management - making them prime monitoring candidates.

Keeping track of changes to custom fields ensures that broken processes can be rectified quickly. [WP Activity Log](#) also supports ACF custom fields, ensuring wide compatibility regardless of your operational requirements.

Database

The database is at the heart of WordPress, housing information such as user accounts and passwords, configuration, plugin and theme data, posts, and much more. The database and its configuration are critical to WordPress' functionality.

Keeping track of each and every change can turn out to be a fool's errand; however, changes to tables are definitely worth logging.

Files

If the WordPress database is the heart, files are its soul. Files and their folders contain the WordPress code, plugin and theme code, media, and much more. However, not all files are benign. Leftover backup files, unreferenced files, and malicious files can all make their way to your WordPress folders.

Knowing when a file has been added or uploaded to your WordPress, modified, or deleted can help you keep your website safe. To this end, WP Activity Log pairs very well with Melapress File Monitor, which offers broad monitoring for all your website files. Through this integration, the plugin will also keep a log of WordPress file changes, including code changes and leftover files.

Menus

Menus allow visitors to navigate across your website, find products and services, and even get in touch - an important step in the sales process. Changes to menus can upset the user navigation, which can lead to higher bounce rates, fewer visitors to your site, or a dip in sales.

If unauthorized changes have been carried out, having a record of those changes helps. Not only can you be notified of those changes, but it'll also help you revert those changes to restore menus to their original configuration.

Multisite networks

Multisite networks are great for managing multiple sites - however, it also means additional responsibilities. Keeping track of such networks can be daunting as new sites and users are added.

Tracking changes to sites and their settings ensures you stay on top of the network as it grows and provides a reference should you ever need to do an audit. At the same time, it encourages other administrators and users to abide by policies, avoiding disorder.

Plugins

Plugins are one of the most valuable additions to the WordPress ecosystem. They can turn a simple blog into any type of website - the only limit is often your imagination. As useful as plugins are, they need to be managed diligently.

Plugins should be vetted and only installed and uninstalled by authorized users, while updates should adhere to the updates strategy to ensure consistent uptime and utmost security. Keeping a log of plugin changes not only ensures that policies are being adhered to but also provides a reference when troubleshooting any issues that may arise.

☐ 5000		July 10, 2024 12:39:37.000 pm	 Joel Barbara Administrator	58.144.76.189	Installed the plugin CAPTCHA 4WP (Premium). Version: 7.5.0.1 Install location: /home/kitaxehawa0436/web/easier-hamster-a4b33d.instawp.xyz/public_html/wp-content/plugins/
☐ 5004		July 11, 2024 7:24:24.000 am	 Joel Barbara Administrator	58.144.76.189	Updated the plugin WooPayments. Updated version: 7.9.0 Install location: woocommerce-payments Previous version: 7.8.1

FIG 19.

Speaking of plugins, WP Activity Log also includes out-of-the-box support for numerous 3rd party plugins such as WooCommerce and many others. Refer to the 3rd party plugin support section for more information.

Posts

Posts are the bread and butter of any WordPress website, being the underlying infrastructure on which websites are built. With WordPress having different post types (there are five different types of posts, including Posts), keeping a log of post changes covers a swath of different changes on your sites.

☐ 2001		July 10, 2024 11:25:40.000 am	 Joel Barbara Administrator	149,102.235,47	Published the post Top 10 WordPress security tips . Post ID: 18 Post type: post Post status: published View the post in editor URL
-------------------------------	---	----------------------------------	---	----------------	---

FIG 20.

Keeping track of new posts, as well as changes to existing posts, helps you ensure that everything is running smoothly while ensuring a record is kept of all changes.

Site and system settings

Site and system settings determine many aspects of your website’s behavior. From language and site details to comment management and everything in between, your site’s settings ensure everything aligns with your requirements.

☐ 6009		May 8, 2024 11:26:33.000 am	 Joel Barbara Administrator	58.144.76.189	Changed the status of the WordPress setting Allow people to submit comments on new posts .
-------------------------------	---	--------------------------------	---	---------------	---

FIG 21.

Unauthorized changes like accepting previously disabled comments can create havoc on your site’s operations. Tracking and logging such changes not only enables you to react quicker but also helps ensure the same mistakes are not repeated.

System

System activities include those activities not carried out by a registered user. Automatic updates, failed login attempts, and sending of emails are some of the potentially critical activities that fall within this category.

While it might be easy enough to tell that WordPress has been updated, if that update breaks something, understanding what happened might not be as straightforward. The same applies to other system activities, such as failed login attempts, which may indicate a forgetful user or a breach attempt.

☐ 1003		May 8, 2024 7:23:33.000 am	 Unknown User	91.90.123.185	1 failed login(s). Download the log file.
-------------------------------	---	-------------------------------	--	---------------	--

FIG 22.

Tags

Tags are a content-organization tool that can help you improve your website’s visitor experience, SEO, and content management. Just like Categories (covered above), tags are a WordPress taxonomy.

Changes to tags, including renaming of tags and slug changes, can alter how content is organized and navigated. Logging such changes makes it easier to undo changes in cases where modifications have been made without authorization.

☐ 2123		May 8, 2024 11:32:35.000 am	 Joel Barbara Administrator	149.102.235.47	Slug Cooking View tag
-------------------------------	---	--------------------------------	---	----------------	--

FIG 23.

Themes

Whether you’re using an off-the-shelf theme or a custom one, your theme represents your visual identity. Many themes also come with additional functionality crucial to how the website functions. Changes to themes can not only break your website but may also indicate a security breach - as may be the case with website defacement.

Logging theme changes (and file changes as covered in the Files section) ensures that you’re notified whenever changes are made to themes as well as files within the theme.

Users

Users are the lifeblood of WordPress websites. Through the roles they’re assigned, users hold the keys to your WordPress website with the ability to make it flourish or descend into chaos.

☐	1000		July 11, 2024 7:23:53.000 am	 Joel Barbara Administrator	152.238.6.252	User logged in.
☐	1002		July 11, 2024 7:23:10.000 am	 Joel Barbara Administrator	152.238.6.252	1 failed login(s).

FIG 24.

As such, tracking user logins and logouts, password changes, and changes to their profile ensures everything stays above board at all times. It also enables you to monitor for suspicious activities to take remedial action before risks become crises.

Widgets

Widgets provide additional functionality and are often employed to increase visitor engagement with content and other elements of your website. Used strategically, widgets can add a lot of value to the user experience of your websites.

Monitoring changes to widgets, then, can enable you to address any unauthorized changes swiftly to return any loss of functionality in no time at all.

Additional coverage

[WP Activity Log](#) is able to track more than just WordPress activities, offering out-of-the-box support for 3rd party plugins as well as an API for custom integrations.

3RD PARTY PLUGIN SUPPORT

3rd party plugins provide many WordPress websites with functionality critical to their operations. Just like other components that we have covered, whatever is critical for your operations should be treated with due diligence.

This includes taking appropriate precautionary measures to ensure that these components continue functioning as they should and that any changes, whether authorized or otherwise, are duly recorded.

To this end, WP Activity Log includes native support for several third-party plugins, including WooCommerce, Yoast SEO, Gravity Forms, and WPForms, among others. Changes pertinent to these plugins are tracked and logged, along with changes to settings and other components.

CUSTOM SENSORS

WP Activity Log includes an API that enables you to [develop your own sensors for custom events](#). Whether you have a 3rd party plugin not currently supported by WP Activity Log out of the box or a custom plugin you developed yourself, you can ensure that these events also get logged.

EVENT DATA AND METADATA

Each activity event logged includes data about the event and metadata - data about the data.

All data and metadata is available through the Log Viewer and can be used in day-to-day log management, reports, and notifications. Each event recorded by WP Activity Log will include the following:

Event ID: A unique identifier for that specific event, which is incredibly useful when conducting searching, running reports, or setting up notifications

Severity: Provides an indication of how severe the event is

Date: The date and time the event occurred

User: The user who actioned the activity, including System

IP: The IP address of the user at the time of the change

Object: The type of object to which the activity relates

Event Type: The type of event that took place

Message: Additional details about the event

☐	ID	Severity	Date	User	IP	Object	Event Type	Message
☐	5000		July 10, 2024 12:39:37.000 pm	Joel Barbara Administrator	91.90.123.187	Plugin	Installed	Installed the plugin CAPTCHA 4WP (Premium) . Version: 7.5.0.1 Install location: /home/kitaxehawa0436/web/eas ier-hamster- a4b33d.instawp.xyz/public_html/wp-content/plugins/

FIG 25.

It is worth noting that all of the activity log fields can be used to search and filter the log, run reports, and set up notifications. On the other hand, the message information will vary according to the type of event.

For example, in the screenshot above, we can see that the user installed a plugin. The message tells us the name of the plugin that was installed, its version, as well as the installation location.

If the user had modified a post, the Message will be entirely different - informing us which post was modified, its status, as well as providing a link to see the content changes.

☐ 2065		July 10, 2024 3:26:44.000 pm	 Marcus Aurelius Contributor	213.122.85.58	Modified the content of the post How to add reCAPTCHA (or other types of CAPTCHA) to your WordPress website.. Post ID: 81 Post type: post Post status: draft View the post in editor URL
-------------------------------	---	---------------------------------	--	---------------	--

FIG 26.

Event metadata

Event metadata provides information and context about the event data. It is data about the data. Metadata can be critical when investigating or analyzing incidents as it provides us with additional information that can support our investigation.

WHICH EVENTS TO TRACK AND LOG

Many administrators and website owners may worry about which events to track. After all, there are hundreds of activity events, and tracking them all may unnecessarily burden the database. This is a common misconception that can be addressed very easily.

While it is true that [WP Activity Log](#) can track and log hundreds of different events, it is highly unlikely that users on your website are actioning all of these events on a regular basis.

To illustrate this with an example, if you're running a WooCommerce eCommerce store, your core products or services are likely to remain the same over a long period of time. Yet, you'll want to know whenever a product or service or one of its attributes is changed.

The plugin has also been optimized over many years to run as leanly as possible. We understand the importance of efficient use of resources and have a zero-waste policy.

There might be events that you're not interested in logging. However, the counter-argument here is that if you don't log it, you can't refer to it - even if the need arises down the line. As such, it is always best to log everything.

WP Activity log offers mechanisms to ensure your database doesn't grow too much, such as integrations and mirroring. We will talk about this in the last chapter.

THE DIFFERENCE BETWEEN REPORTING AND NOTIFICATIONS

The Log Viewer is the primary access point to view and search for events. It provides a nice and friendly GUI (Graphical User Interface) through which you can monitor the different activities on your website.

However, you can also make use of reports and notifications to automatically stay in the loop about events that are critical to you. Both reports and notifications can be preset and automated, giving you the opportunity to stay informed about critical events without having to log in to your WordPress dashboard.

Reports

Reports can be scheduled or run ad-hoc and provide us with information about a large number of events in a more digestible format. Reports come with extensive white-labeling options, making them ideal to share with clients and stakeholders without having to provide access to the entire log.

Reports can be customized to include and exclude events based on the criteria you input, ensuring you retain control over which data gets shared at all times.

Notifications

Think of notifications as reports for singular events - ideal for staying informed about events you deem critical. Notifications can be sent by email or SMS, ensuring you can stay in the loop at all times.

Events can be customized through triggers, which provide comprehensive customization options.

Add New Email Notification
[Back](#)

Name

Joel logged in after hours

Configure the triggers that should match for an email and / or SMS notification to be sent. You can add up to 20 triggers, use the AND and OR operands, and also group triggers together. Refer to the [Trigger groups documentation](#) for more information.

Triggers
[+ Add Trigger](#)

	EVENT ID	IS EQUAL	1000	Delete	
AND	USERNAME	IS EQUAL	Joel	Delete	Grouping
AND	TIME	IS AFTER	05:00PM	Delete	Grouping
AND	TIME	IS BEFORE	08:00AM	Delete	Grouping

Email Address(es) or WordPress Users:

joel@melapress.com

Mobile number(s) for SMS notifications:

Enter full mobile number (country cc

Specify the email address, WordPress username or a phone number of those who should receive the notification once the trigger is matched. Click [here](#) to configure Twilio integration for SMS notifications.

[Add Notification](#)

FIG 27.

INFRASTRUCTURE REQUIREMENTS

WP Activity Log does not need specific requirements and can run on any WordPress website. We'll be looking at individual infrastructure components in this section.

DATA STORAGE

Log data storage is one of the primary concerns those looking to implement the [WP Activity Log](#) WordPress logging solutions typically have. A valid, even if unwarranted, concern. Let's discuss.

During the initial configuration process, the wizard will ask you to set the log level. Options include **Basic** or **Geek**. The **Geek** level logs everything, while **Basic** limits the logging scope to a basic level. This setting can be adjusted anytime by navigating to **WP Activity Log > Enable/Disable Events**.

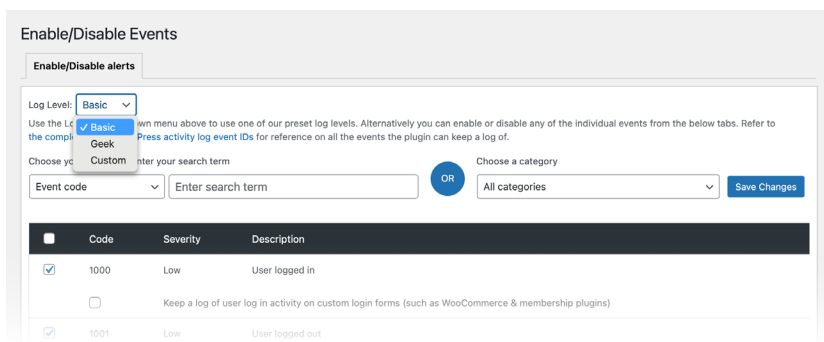


FIG 28.

As discussed in the previous chapter, it's always best to log every activity - after all, you cannot refer to data you do not have. However, if space is an issue, you can always limit the scope.

Aside from the Basic Log Level, you can also choose Custom - which allows you to pick and choose which activities you want tracked and logged.

However, there is an even better option - saving activity log entries offsite.

WP Activity Log's Integrations option enables you to connect to an external database or third-party service and use it as external storage. This feature can not only offload storage requirements off the WordPress server but also ensures logs remain accessible in an outage event.

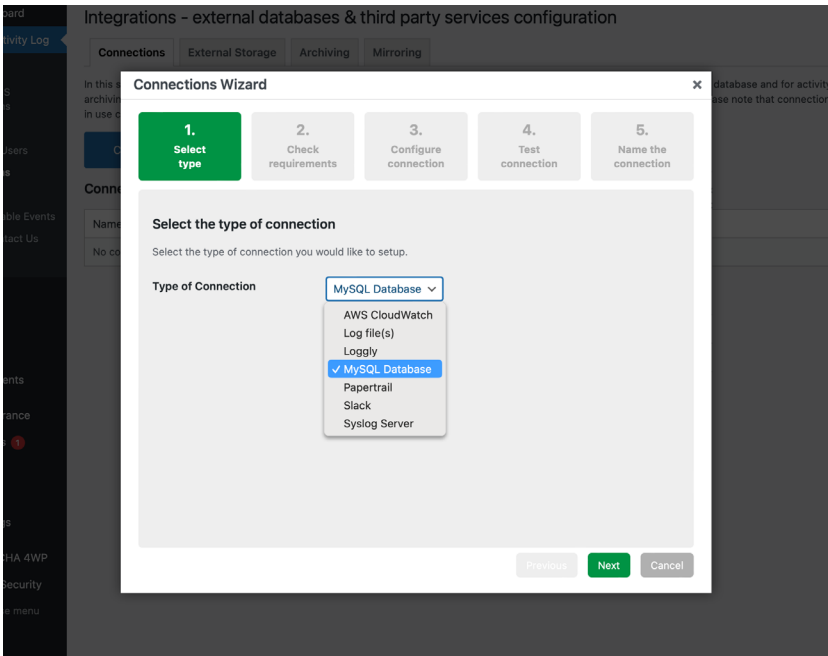


FIG 29.

It is equally important to recognize that the plugin is extremely efficient and prudent with space.

Of course, the more activity you have on your WordPress website, the more you can expect the log to grow. However, server resources tend to grow with the scope of the website, so the size of the log should not be a primary concern.

RESOURCE USAGE

Like data storage, resource usage also tends to be a concern among prospective administrators. After all, if the plugin logs each activity this is bound to have an effect on the performance of the server.

The good news is that testing we have done internally, as well as customer feedback, has shown that any performance degradation is negligible at worst. The plugin has an actual company and a team of developers and testers behind it. It has been around for some time and has undergone its fair share of optimization and refactoring rounds.

Unless the server is being worked to an inch of its life before installing the plugin, it is highly unlikely you'll notice any degradation in performance. Of course, there is always going to be a straw that breaks the camel's back - but you can hardly blame that one straw.

IMPORTANT

Activity logging and GDPR compliance

It is important to note that GDPR does not prohibit you from logging user and system activities. In fact, this is important to ensure the security and integrity of user data.

[WP Activity Log](#) does not send any user data to our servers - the only information that is ever sent is related to licensing. This is limited to the URL of the website, along with the plugin and WordPress version numbers.

WP Activity Log also includes a feature that enables you to advise users that activities are being logged. This optional feature is fully customizable, allowing you to edit the message users see to fit your requirements.

There is no plugin that can achieve GDPR compliance for you. However, plugins like WP Activity Log can help you meet certain requirements. It remains important to familiarize yourself with what GDPR requires and make decisions based on your specific exigencies.

START LOGGING WORDPRESS ACTIVITY NOW

WordPress does not log user and system activities - which means you'll need a plugin like WP Activity Log to start tracking events. One common misconception is that WP Activity Log simply unearths logs that are already there. This is not the case, as it is the plugin itself that logs events. Because of this, you should get started with WP Activity Log as soon as possible.

WHY CHOOSE WP ACTIVITY LOG

Activity logging is at the heart of WP Activity Log. However, like a car needs comfortable seats and a spacious boot to make it useful, so does WP Activity Log include additional features that make this plugin head and shoulders above the rest.

COMPREHENSIVE AND EXTENSIVE

WP Activity Log is able to log a wide variety of WordPress user and system activities, with new activities added on a frequent basis. Furthermore, for each activity that it logs, it is able to collect a rich array of data, which allows for better WordPress management and security.

You can also choose to limit the amount of data the plugin collects, with both log detail and activity logging being configurable. Furthermore, users, roles, and many other objects and object categories can easily be excluded from the log.

SUPPORTING FEATURES

WP Activity Log is easy to set up and use, thanks to the setup wizard, which helps you set up the plugin in no time at all. It also has an [extensive feature set](#), enabling you to do more with your activity log.

CUSTOMER SUPPORT

All WP Activity Log plans, including the free edition, come with email support and an extensive knowledge base that'll ensure you can always get the most out of the plugin.

PLUGIN UPDATES

Regular plugin updates ensure a consistent stream of improvements and fixes as well as new features over your subscription period. With a team of professionals developing, testing, and supporting all of Melapress' plugins, you can rest assured that you'll be in safe hands.

INSTALLING WP ACTIVITY LOG

[WP Activity Log](#) is very easy to install and use. It comes in both free and paid versions. The free version offers all of the basic logging functionality with no restrictions on which events get logged. The premium version adds functionality such as User Session Management, Advanced Search Filters, Notifications, Archiving, and much more.

You can purchase the Premium or Enterprise edition directly from Melapress' website. Once purchased, you will receive an email with a download link for the premium plugin and your license key.

Each plan includes unlimited email support (with real humans) and updates for a whole year. Discounts are available for multi-site licenses.

Melapress also offers an extensive Knowledge Base should you need instant answers (although our support team is very quick to respond to emails).

[Get WP Activity Log](#)



WP ACTIVITY LOG

THE #1 ACTIVITY LOG PLUGIN FOR WORDPRESS OVERSIGHT

WP Activity Log is a must-have tool for improving security, accountability, fraud prevention, compliance, and troubleshooting processes. Thanks to its comprehensive logging capabilities, administrators of WordPress websites of all sizes can benefit from what this plugin has to offer.

- **Track user and system activity:** WP Activity Log tracks a wide range of WordPress activities and also supports several 3rd party plugins out of the box
- **User session management:** See who is logged in at any given time and their activities, force log-outs, and set up policies to prevent account sharing
- **Reports and notifications:** Untether yourself from your desk without losing sight of what is happening on your site thanks to SMS and email notifications as well as periodic and ad-hoc reports
- **Fits like a glove, whatever the environment:** Set up log retention policies, logs systems integration, external database support, and much more

Supercharge your WordPress oversight with WP Activity Log and take advantage of the many benefits this plugin has to offer.

[Get WP Activity Log](#)

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