# Using WordPress Security Logs to Secure Your Site

## Adding WP Security Logs

You can use some of the <u>developer functions and</u> <u>filters</u> that WordPress provides to create a logging system, but the easiest way to start a security log is to install a <u>WordPress security plugin</u> like iThemes Security that will automatically keep track of site and user activity.

Once you've installed and activated the iThemes Security plugin, **enable the following features** in iThemes Security to get the most out of your security logs:





Database Backups

File Change Detection



Malware Scan Scheduling **PRO** 



User Logging **PRO** 



Version Management **PRO** 

#### 4 Important Events to Monitor in WordPress Security Logs



## 1. WordPress Brute Force Attacks

ore Introspection	🛡 0 🕂 I	New Secu	rity 🛯 🎒 Maintenance Mode 🗩				Login Alerts 😰 Clear Cache Howdy, mmc
<sup>ard</sup> iT	hemes S	Security	Manage Settings Support	]			Screen Options
_							
Im	portant Events	s (41)   All	Malware Scan				
В	Brute Force	\$	This malware scan is powered by Sucuri				
nts	Module	Туре	Description	Time	Host	User Details	SiteCheck. It checks for known malware, blacklisting status, website errors and
ce	Brute Force	Notice	Banned Use of "admin" Username	2018-10-18 10:26:33 - 24 hours ago	216.185.36.46	View Details	out-of-date software. Although the Sucur team does its best to provide thorough results, 100% accuracy is not realistic and
B	Brute Force	Notice	Invalid Login	2018-10-13 16:19:02 - 6 days ago	85.93.20.246	View Details	is not guaranteed. Results of previous malware scans can be
E	Brute Force	Notice	Invalid Login	2018-10-13 15:06:03 - 6 days ago	85.93.20.246	View Details	found on the <u>logs page</u> . Scan Homepage for Malware
E	Brute Force	Notice	Invalid Login	2018-10-13 13:53:43 - 6 days ago	85.93.20.246	View Details	
E	Brute Force	Notice	Invalid Login	2018-10-13 12:41:13 - 6 days ago	85.93.20.246	View Details	There are no active lockouts at this time.
E	Brute Force	Notice	Invalid Login	2018-10-13 08:55:36 - 6 days ago	85.93.20.246	View Details	Need Help Securing Your Site?
E	Brute Force	Notice	Invalid Login	2018-10-13 08:20:54 - 6 days ago	85.93.20.246	View Details	As an iThemes Security Pro customer, you can create a support ticket now. Our
E	Brute Force	Notice	Invalid Login	2018-10-13 07:22:52 - 6 days ago	85.93.20.246	View Details	team of experts is ready to help. Create a Support Ticket
E	Brute Force	Notice	Invalid Login	2018-10-13 05:43:34 - 6 days ago	85.93.20.246	View Details	
E	Brute Force	Notice	Invalid Login	2018-10-13 04:33:06 - 6 days ago	85.93.20.246	View Details	
P	Brute Force	Notice	Invalid Login	2018-10-13 02:50:30 - 6 days ago	85.93.20.246	View	

#### 1. WordPress Brute Force Attacks

<u>Brute force attacks</u> refer to the trial and error method used to discover usernames and passwords in order to hack into a website. WordPress doesn't track any user login activity, so there isn't anything built into WordPress to protect you from a brute force attack. It is up to you to monitor your login security to protect your WordPress site.

If you see that a single username or IP has consecutive multiple failed login attempts, the chances are you are under a brute force attacks.

Identifying when you are under a brute force attack is a great start, but there is still more work to be done. You can increase the <u>WordPress login security</u> by limiting the number of failed login attempts a single user or IP is allowed to have before they are blocked from making any more attempts.

# 2. File Changes

) 🖀 sync 🛡 0 🕂	New Security							Howdy, mmoo
Dashboard	Important Event	ts (14)   All Ev	vents (147)   Fatal Errors (3)   Warnings	(11)   Actions (2)   Notices (131)				Malware Scan
Posts	All Modules	\$	Filter				11 items	This malware scan is powered by Sucuri
] Media	Module	Туре	Description	Time	Host	User	Details	SiteCheck. It checks for known malware, blacklisting status, website errors and
Pages Comments	File Change	Warning	5 Added, 0 Removed, 0 Changed	2018-10-19 14:06:16 - 1 hour ago			View Details	team does its best to provide thorough results, 100% accuracy is not realistic and is not quaranteed
Appearance	File Change	Warning	144 Added, 0 Removed, 0 Changed	2018-10-09 13:48:39 - 1 week ago			View Details	Results of previous malware scans can be found on the logs page.
Plugins Users	File Change	Warning	0 Added, 1302 Removed, 0 Changed	2018-10-09 13:18:12 - 1 week ago			View Details	Scan Homepage for Malware
Tools	File Change	Warning	1 Added, 0 Removed, 0 Changed	2018-10-04 16:28:53 - 2 weeks ago			View Details	Active Lockouts
Security	File Change	Warning	1 Added, 0 Removed, 0 Changed	2018-10-03 14:16:58 - 2 weeks ago 🍸			View Details	There are no active lockouts at this time.
ings	File Change	Warning	24 Added, 0 Removed, 22 Changed	2018-10-01 19:44:37 - 3 weeks ago		mmoore	View Details	Complete Your Security Strategy With BackupBuddy
rity Check e Report	File Change	Warning	103 Added, 0 Removed, 54 Changed	2018-10-01 15:45:40 - 3 weeks ago			View Details	
ogs ebug	File Change	Warning	127 Added, 0 Removed, 2 Changed	2018-09-28 15:18:52 - 3 weeks ago		mmoore	View Details	BACKUP
ollapse menu	File Change	Warning	511 Added, 62 Removed, 207 Changed	2018-09-26 17:53:12 - 3 weeks ago			View Details	BUDDY
	File Change	Warning	1 Added, 0 Removed, 0 Changed	2018-09-25 13:12:33 - 3 weeks ago			View Details	BackupBuddy is the complete backup, restore and migration solution for your
	File Change	Warning	0 Added, 0 Removed, 32 Changed	2018-08-23 19:49:05 - 2 months ago			View Details	WordPress site. Schedule automated backups, store your backups safely off- site and restore your site quickly & easily.
	Module	Туре	Description	Time	Host	User	Details	Get BackupBuddy

#### ore 💹

## 2. File Changes

There are several legitimate reasons you would see new file change activity in your logs, but if the changes made were unexpected, you should take the time to assure the changes were not malicious.

#### **Comparing File Changes**

WordPress provides <u>WP-CLI commands</u> to compare the file hashes of core and plugin files easily. For comparing WordPress core files use the <u>wp core verify-checksums command</u>, and for plugins, you can use the <u>wp plugin verify-checksums command</u>. There currently isn't a WP-CLI command to compare theme file hashes, <u>but it is on the roadmap</u>.

Enable the Compare Files Online option in the iThemes Security Pro File Change settings to automatically compare .org and iThemes file hashes.

Compare file changes by comparing differences in a Text Editor.

#### 3. Malware Scans

🕅 📸 sync 🛡 0 ·	+ New Security							Howdy, mm
Dashboard	iThemes Se	curity	Manage Setting	s Support				Screen Option
Posts								
Media	Important Events (	14)   All Eve	ents (147)   Fata	Errors (3)   Warnings (11)   Actions (2)	Notices (131)			Malware Scan
Pages	Malware Scan	¢ F	ilter		42 items	« < 2	of 3 , »	This malware scan is powered by Sucuri
Comments	Module	Туре	Description	Time	Host	User	Details	SiteCheck. It checks for known malware, blacklisting status, website errors and
Appearance	Malware Scan	Notice	Clean	2018-10-03 14:04:58 - 2 weeks ago	2607:3f00:1:6::2		View Details	out-of-date software. Although the Sucu team does its best to provide thorough
Plugins Users	Malware Scan	Notice	Clean	2018-10-02 15:17:11 - 2 weeks ago	2607:3f00:1:6::2		View Details	is not guaranteed. Results of previous malware scans can b
Tools	Malware Scan	Notice	Clean	2018-10-01 15:44:24 - 3 weeks ago	2607:3f00:1:6::2		View Details	found on the <u>logs page</u> .
Security	Malware Scan	Notice	Clean	2018-09-28 15:01:17 - 3 weeks ago	69.167.144.233	mmoore	View Details	
ttings	Malware Scan	Notice	Clean	2018-09-26 16:45:08 - 3 weeks ago	2607:3f00:1:6::2		View Details	Active Lockouts There are no active lockouts at this time.
curity Check ade Report	Malware Scan	Notice	Clean	2018-09-26 12:24:12 - 3 weeks ago	2607:3f00:1:6::2		View Details	Complete Your Security Strategy
pug	Malware Scan	Notice	Clean	2018-09-25 13:00:19 - 3 weeks ago	2607:3f00:1:6::2		View Details	With BackupBuddy
Collapse menu	Malware Scan	Notice	Clean	2018-09-24 20:45:53 - 4 weeks ago	69.167.144.233	mmoore	View Details	
	Malware Scan	Notice	Clean	2018-09-13 13:35:34 - 1 month ago	2607:3f00:1:6::2		View Details	BUDDY
	Malware Scan	Notice	Clean	2018-09-12 15:06:27 - 1 month ago	2607:3f00:1:6::2		View Details	BackupBuddy is the complete backup,
	Malware Scan	Notice	Clean	2018-09-12 13:14:02 - 1 month ago	2607:3f00:1:6::2		View	WordPress site. Schedule automated

#### 3. Malware Scans

Make sure you have enabled Malware Scan Scheduling in your iThemes Security Pro settings.

It is crucial to be alerted as quickly as possible of a breach to your site. The longer it takes for you to know about a hack the more damage it will do. Not only should you run malware scans, you should also be recording the results of every malware scan in your WordPress security logs.

Not knowing the scans are failing could result in your site not being regularly scanned for malware.

## 4. User Activity

s User Lo	iging 🗧	Filter		32 items	< 1 of 2	> »	This work was a
ia Module	Туре	Description	Time	Host	User	Details	SiteCheck. It ch
nts Logging	Notice	mmoore Logged In	2018-10-22 08:59:54 - 14 mins ago	207.246.249.202	mmoore	View Details	out-of-date sol team does its b results, 100% a
User Logging	Notice	mmoore Logged In	2018-10-18 09:49:51 - 4 days ago	207.246.249.202	mmoore	View Details	Results of previ
User Logging	Notice	mmoore Logged In	2018-10-16 09:10:27 - 6 days ago	69.167.144.233	mmoore	View Details	Scan Homepa
dy User Logging	Notice	mmoore Logged In	2018-10-16 09:10:21 - 6 days ago	69.167.144.233	mmoore	View Details	Active Lockou
User Logging	Notice	Activated iThemes Sync Plugin	2018-10-16 09:06:57 - 6 days ago	207.246.249.199	mmoore	View Details	Need Help Se
User Logging	Notice	mmoore Logged In	2018-10-16 09:04:13 - 6 days ago	207.246.249.197	mmoore	View Details	As an IT nemes you can create team of experts
User enu Logging	Notice	mmoore Logged Out	2018-10-16 09:04:07 - 6 days ago	207.246.249.199	mmoore	View Details	Create a Supp
User Logging	Notice	mmoore Logged In	2018-10-16 09:03:34 - 6 days ago	207.246.249.202	mmoore	View Details	

an is powered by <u>Sucuri</u> ecks for known malware, us, website errors and ware. Although the Sucuri est to provide thorough curacy is not realistic and

ous malware scans can be s page.

ive lockouts at this time.

#### curing Your Site?

Security Pro customer, a support ticket now. Our is ready to help.

ort Ticket

4. Type of User Activity to Record







0

2. User Creation

Pages



4. Changes to Posts &

As we can see, having the right information can help stop an attack, alert you of a breach, pinpoint the time of the breach, access the damage, and help you with cleanup. Use the checklist below to aid you in monitoring your WordPress security logs:



Download Events to Monitor Infographic.

https://ithemes.com/wp-content/uploads/2018/10/WordPress-Security-Lo <u>gs.png</u>

Check out WP Security Logs blog post.

https://ithemes.com/2018/10/25/how-to-wordpress-security-logs/

We have a YouTube channel!

http://ithemes.com/youtube