# WP fail2ban Manual

**Charles Lecklider** 

# Contents

1	Intro	oduction	3
	1.1	History	3
	1.2	Future	3
2	Featu	ures	5
	2.1	NEW - Multisite Support	5
	2.2	NEW - Block username logins	5
	2.3	NEW - Filter for Empty Username Login Attempts	5
	2.4	NEW - syslog Dashboard Widget	5
	2.5	Remote Tools Add-on	5
	2.6	Support for 3rd-party Plugins	6
	2.7	CloudFlare and Proxy Servers	6
	2.8	Comments	6
	2.9	Pingbacks	6
	2.10	Spam	6
	2.11	User Enumeration	6
	2.12	Work-Arounds for Broken syslogd	6
	2.13	Blocking Users	6
	2.14	mu-plugins Support	7
3	Insta	allation	9
	3.1	Is WP fail2ban Already Installed?	9
	3.2	Overview	9
		3.2.1 Premium	10
4	Conf	figuration	11
	4.1	WP fail2ban	11
	4.2	Logging	11
		4.2.1 Choosing the Events to Log	11
		4.2.2 Advanced Users	11
	4.3	fail2ban	12
		4.3.1 Filters	13
	4.4	mu-plugins Support	14
		4.4.1 Loading Early	14
		4.4.2 Forcing Usage	14
5	Usag	ge e	17

	5.1 5.2	Event Log	17 17
6	Add-	ons	19
7	<b>Devel</b> 7.1 7.2	Overview       2         7.1.1 Register Plugin       2         7.1.2 Register Message       2         7.1.3 Log Message       2         7.1.4 Design       2	21 21 22 23 23 23
8			25
o	8.1	4.3.0	25 25 25 26
9	define	e() Constants	27
9	define 9.1	All 9.1.1 WP_FAIL2BAN_AUTH_LOG 9.1.2 WP_FAIL2BAN_BLOCKED_USERS 9.1.3 WP_FAIL2BAN_BLOCK_USERNAME_LOGIN 9.1.4 WP_FAIL2BAN_BLOCK_USER_ENUMERATION 9.1.5 WP_FAIL2BAN_COMMENT_EXTRA_LOG 9.1.6 WP_FAIL2BAN_COMMENT_LOG 9.1.7 WP_FAIL2BAN_DISABLE_LAST_LOG 9.1.8 WP_FAIL2BAN_EX_BLOCK_COUNTRIES 9.1.9 WP_FAIL2BAN_EX_BLOCK_COUNTRIES 9.1.9 WP_FAIL2BAN_EX_LOG_HEADERS 9.1.10 WP_FAIL2BAN_EX_LOG_POST_DATA 9.1.12 WP_FAIL2BAN_EX_LOG_REFERER 9.1.13 WP_FAIL2BAN_EX_LOG_URL 9.1.14 WP_FAIL2BAN_EX_LOG_USER_AGENT 9.1.15 WP_FAIL2BAN_EX_LOG_USER_AGENT 9.1.16 WP_FAIL2BAN_EX_MAXMIND_LICENSE 9.1.17 WP_FAIL2BAN_EX_PROXY_CLOUDFLARE 9.1.18 WP_FAIL2BAN_EX_XMLRPC_BLOCKED 9.1.19 WP_FAIL2BAN_EX_XMLRPC_JETPACK 9.1.19 WP_FAIL2BAN_EX_XMLRPC_LOG 9.1.20 WP_FAIL2BAN_EX_XMLRPC_TRUSTED_IPS	27 27 27 28 28 28 29 29 29 30 30 30 31 31
		9.1.22 WP_FAIL2BAN_HTTP_HOST  9.1.23 WP_FAIL2BAN_LOG_COMMENTS  9.1.24 WP_FAIL2BAN_LOG_COMMENTS_EXTRA  9.1.25 WP_FAIL2BAN_LOG_PASSWORD_REQUEST  9.1.26 WP_FAIL2BAN_LOG_PINGBACKS  9.1.27 WP_FAIL2BAN_LOG_SPAM  9.1.28 WP_FAIL2BAN_OPENLOG_OPTIONS  9.1.29 WP_FAIL2BAN_PASSWORD_REQUEST_LOG  9.1.30 WP_FAIL2BAN_PINGBACK_ERROR_LOG  9.1.31 WP_FAIL2BAN_PINGBACK_LOG  9.1.32 WP_FAIL2BAN_PLUGIN_AUTH_LOG  9.1.33 WP_FAIL2BAN_PLUGIN_COMMENT_LOG  9.1.34 WP_FAIL2BAN_PLUGIN_LOG_AUTH	31 31 32 32 33 33 33 34 34

		9.1.36 WP_FAIL2BAN_PLUGIN_LOG_OTHER
		9.1.37 WP_FAIL2BAN_PLUGIN_LOG_PASSWORD
		9.1.38 WP_FAIL2BAN_PLUGIN_LOG_REST
		9.1.39 WP_FAIL2BAN_PLUGIN_LOG_SPAM
		9.1.40 WP_FAIL2BAN_PLUGIN_LOG_XMLRPC
		9.1.41 WP_FAIL2BAN_PLUGIN_OTHER_LOG
		9.1.42 WP_FAIL2BAN_PLUGIN_PASSWORD_LOG
		9.1.43 WP_FAIL2BAN_PLUGIN_REST_LOG
		9.1.44 WP_FAIL2BAN_PLUGIN_SPAM_LOG
		9.1.45 WP_FAIL2BAN_PLUGIN_XMLRPC_LOG
		9.1.46 WP_FAIL2BAN_PROXIES
		9.1.47 WP_FAIL2BAN_REMOTE_ADDR
		9.1.48 WP_FAIL2BAN_REST_API
		9.1.49 WP_FAIL2BAN_REST_SECRET
		9.1.50 WP_FAIL2BAN_SPAM_LOG
		9.1.51 WP_FAIL2BAN_SYSLOG_SHORT_TAG
		9.1.52 WP_FAIL2BAN_TRUNCATE_HOST
		9.1.53 WP_FAIL2BAN_USE_AUTHPRIV
		9.1.54 WP_FAIL2BAN_XMLRPC_LOG
	9.2	Logging
		9.2.1 Premium
	9.3	syslog
	9.4	Block
		9.4.1 Premium
	9.5	Remote IPs
		9.5.1 Premium
	9.6	Plugins
	9.7	Miscelaneous
10	17215	41
10	Facili	ities 41
11	Logfi	le Reference 43
12	Defai	ult Facilities 45
1-		Premium
13	Filter	· Files
13		wordpress-hard.conf
	13.1	wordpress-soft.conf
		wordpress-extra.conf
	10.0	wordprood exeru.com

WP fail2ban is a WordPress plugin to write a myriad of events to syslog for integration with fail2ban.

Contents 1

2 Contents

Introduction

# 1.1 History

As with many Open Source projects, *P fail2ban* started as way to scratch a particular itch. I had a dedicated server that was getting some unwelcome attention from various bots, and while it was trivial to configure *fail2ban* for ssh etc, WordPress was another story. Thus *WP fail2ban* was born late November 2011.

Since then it's slowly but steadily accumulated features, and much to my surprise, gained a considerable number of installs (30,000+ at the time of writing) - I really had no idea so many other people would be interested!

Between versions 3.5 and 3.6 there was a bit of a delay. I switched my development environment from Windows 10<sup>1</sup> to a FreeBSD workstation and a Linux laptop, life then decided to take its turn and get in the way for a bit, all while the shadow of Gutenberg loomed large over the future of WordPress. With the advent of ClassicPress<sup>2</sup> things started to look sunnier, so I dusted off the repo, put together some better documentation, braved the horrors of svn, and in November 2018 released 3.6 as a pseudo 7th anniversary present.

### 1.2 Future

Version 4 was born from a desire to visualise the things WPf2b was logging; being entirely separate and distinct from the core functionality, adding this as freemium features seemed like a good plan. Time will tell.

This logical separation will continue for all future versions - if you were happy with the way 3.6 worked you'll be happy with future versions too.

<sup>&</sup>lt;sup>1</sup> It took me a while to realise that Microsoft really do want to turn Windows 10 into a toy, but I got there eventually.

<sup>&</sup>lt;sup>2</sup> In the interests of full disclosure: I'm a Founding Committee Member and at the time of writing, Security Team Lead.

**Features** 

# 2.1 NEW - Multisite Support

Version 4.3 introduces proper support for multisite networks.

# 2.2 NEW - Block username logins

Sometimes it's not possible to block user enumeration (for example, if your theme provides Author profiles). Version 4.3 adds support for requiring the use of email addresses for login.

# 2.3 NEW - Filter for Empty Username Login Attempts

Some bots will try to login without a username. Version 4.3 logs these attempts and provides an "extra" filter to match them.

# 2.4 NEW - syslog Dashboard Widget

Ever wondered what's being logged? The new dashboard widget shows the last 5 messages; the Premium version keeps a full history to help you analyse and prevent attacks.

### 2.5 Remote Tools Add-on

The Remote Tools add-on provides extra features without adding bloat to the core plugin. For more details see the add-on page.

# 2.6 Support for 3rd-party Plugins

Version 4.2 introduced a simple API for authors to integrate their plugins with WPf2b, with 2 experimental add-ons:

- Contact Form 7
- · Gravity Forms

# 2.7 CloudFlare and Proxy Servers

WPf2b can be configured to work with CloudFlare and other proxy servers. For a brief overview see WP\_FAIL2BAN\_PROXIES.

### 2.8 Comments

WPf2b can log both successful comments (see WP\_FAIL2BAN\_LOG\_COMMENTS), and unsuccessful comments (see WP\_FAIL2BAN\_LOG\_COMMENTS\_EXTRA).

# 2.9 Pingbacks

WPf2b logs failed pingbacks, and can log all pingbacks. For a brief overview see WP\_FAIL2BAN\_LOG\_PINGBACKS.

# 2.10 Spam

WPf2b can log comments marked as spam. See WP\_FAIL2BAN\_LOG\_SPAM.

## 2.11 User Enumeration

WPf2b can block user enumeration. See WP\_FAIL2BAN\_BLOCK\_USER\_ENUMERATION.

# 2.12 Work-Arounds for Broken syslogd

WPf2b can be configured to work around most syslogd weirdness. For a brief overview see WP\_FAIL2BAN\_SYSLOG\_SHORT\_TAG and WP\_FAIL2BAN\_HTTP\_HOST.

# 2.13 Blocking Users

WPf2b can be configured to short-cut the login process when the username matches a regex. For a brief overview see WP\_FAIL2BAN\_BLOCKED\_USERS.

6 Chapter 2. Features

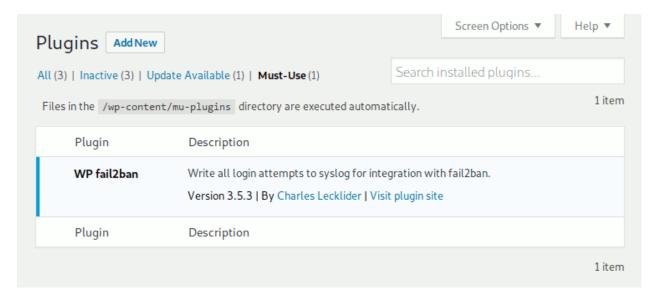
# 2.14 mu-plugins Support

WPf2b can easily be configured as a must-use plugin.

8 Chapter 2. Features

Installation

# 3.1 Is WP fail2ban Already Installed?



WP fail2ban pre-installed in mu-plugins in a new DigitalOcean WordPress droplet.

## 3.2 Overview

WPf2b installs just like any other WordPress plugin - you need do nothing differently.

## 3.2.1 Premium

The Premium version installs via Freemius.

### **Database**

Activating WPf2b Premium creates two database tables:

- wp\_fail2ban\_log
- wp\_fail2ban\_plugins

 $\mathit{WPf2b}$  Premium never drops the database tables - it's your data.

Configuration

Now you have WPf2b installed and activated it's time to make it do something useful.

## 4.1 WP fail2ban

The Free version of *WPf2b* is configured by defining constants in wp-config.php. If you're using the Premium version, or you know your way around wp-config.php already, skip ahead to *Logging*.

The first step is to check you can edit your wp-config.php file. If you're not sure how to do that you'll need to contact your hosting provider - for now you can skip ahead to configuring *fail2ban*.

The second step is to **take a backup** of wp-config.php. We're not going to touch any other part of WordPress, so if anything goes wrong and your site stops working, restoring this backup should get you running again.

# 4.2 Logging

The key concept behind *WPf2b* is logging *Events* to syslog. If *WPf2b* doesn't log an Event, or logs it to the wrong place, fail2ban won't work as it should. If in doubt go with the defaults - they should work for most systems, and once you understand how the pieces fit together you can revisit this.

## 4.2.1 Choosing the Events to Log

If you're unfamiliar with fail2ban and syslog I recommend **not** enabling any extra logging to start with - skip ahead to configuring *fail2ban*. *WPf2b* automatically handles the most important things with sensible defaults that should work for most systems.

#### 4.2.2 Advanced Users

#### **Events**

Over the years WPf2b has accumulated a lot of logging ability (and there're even more on the way):

Event	Reference
Auth OK	WP_FAIL2BAN_AUTH_LOG
Auth Fail	
Blocked User	WP_FAIL2BAN_BLOCKED_USERS
Blocked User Enumeration	WP_FAIL2BAN_BLOCK_USER_ENUMERATION
Blocked Username Login	WP_FAIL2BAN_BLOCK_USERNAME_LOGIN
Comment	WP_FAIL2BAN_LOG_COMMENTS
Comment: Spam	WP_FAIL2BAN_LOG_SPAM
Attempted Comment: Post not found	WP_FAIL2BAN_LOG_COMMENTS_EXTRA
Attempted Comment: Closed post	WP_FAIL2BAN_LOG_COMMENTS_EXTRA
Attempted Comment: Trash post	WP_FAIL2BAN_LOG_COMMENTS_EXTRA
Attempted Comment: Draft post	WP_FAIL2BAN_LOG_COMMENTS_EXTRA
Attempted Comment: Password-protected post	WP_FAIL2BAN_LOG_COMMENTS_EXTRA
Pingback	WP_FAIL2BAN_LOG_PINGBACKS
Pingback error	WP_FAIL2BAN_PINGBACK_ERROR_LOG

You should consider enabling *Comment: Spam* and *Attempted Comment: Closed post*, and, if you don't use Word-Press's commenting system at all, you should enable **all** the *Attempted Comment* Events.

#### **Facilities**

By default, *WPf2b* uses the following syslog Facilities and *Levels*:

What	Default	Level
Auth OK	LOG_AUTH	INFO
Auth Fail		NOTICE
Blocked User		
Blocked User Enum		
Comment	LOG_USER	INFO
Comment: Spam	LOG_AUTH	NOTICE
Comment: Post not found		
Comment: Closed post		
Comment: Trash post		
Comment: Draft post		
Comment: Password-protected post		
Pingback	LOG_USER	INFO
Pingback error	LOG_AUTH	NOTICE

Unfortunately, there is no way of knowing *a priori* which Facility goes where. There is a table of default locations of *Logfile Reference* for various OSs; if you're running something not listed there and you know where the various Facilities go, please either submit a PR on GitHub, or let me know in the forum.

# 4.3 fail2ban

fail2ban can be tricky to configure correctly; with so many flavours of Linux it's impossible to provide anything but general guidance.

### 4.3.1 Filters

The filter files included are intended only as a starting point for those who want WPf2b to work "out of the box".

There is no "one size fits all" configuration possible for *fail2ban* - what may be a soft failure for one site should be treated as a hard failure for another, and vice versa. Careful thought should be given to what is appropriate for your environment.

### **Typical Settings**

- 1. Copy wordpress-hard.conf and wordpress-soft.conf to your fail2ban/filters.d directory
- 2. Edit *jail.local* to include something like:

```
[wordpress-hard]
enabled = true
filter = wordpress-hard
logpath = /var/log/auth.log
maxretry = 1
port = http,https

[wordpress-soft]
enabled = true
filter = wordpress-soft
logpath = /var/log/auth.log
maxretry = 3
port = http,https
```

**Note:** Make sure you change logpath to the correct log for your OS. If your OS uses *systemd* you may need to install a real syslog service.

3. Reload or restart fail2ban

### wordpress-hard.conf and wordpress-soft.conf

There are some things that are almost always malicious, e.g. blocked users and pingbacks with errors. *wordpress-hard.conf* is designed to catch these so that you can ban the IP immediately.

Other things are relatively benign, like a failed login. You can't let people try forever, but banning the IP immediately would be wrong too. *wordpress-soft.conf* is designed to catch these so that you can set a higher retry limit before banning the IP.

For the avoidance of doubt: you should be using both filters.

#### wordpress-extra.conf

Version 4 introduced a number of new logging options which didn't fit cleanly into either of the *hard* or *soft* filters - they're *extra*.

For example, if your site doesn't use WordPress comments at all, you could add the rules matching attempted comments to the *hard* filter. Again, there is no "one size fits all" for these rules.

4.3. fail2ban

# 4.4 mu-plugins Support

There are two main reasons for using *mu-plugins*:

- 1. You need to load WPf2b before other security plugins<sup>1</sup>,
- 2. You don't trust the site administrators.

### 4.4.1 Loading Early

One of the better ways is to install WPf2b as usual and then create a symlink in mu-plugins:

```
# ln -s ../plugins/wp-fail2ban/wp-fail2ban.php
# ls -l
total 1
lrwxr-xr-x 1 www www 38 4 Nov 16:24 wp-fail2ban.php -> ../plugins/wp-fail2ban/wp-
-fail2ban.php
```

#### or for the Premium version:

```
# ln -s ../plugins/wp-fail2ban-premium/wp-fail2ban.php
# ls -l
total 1
lrwxr-xr-x 1 www www 38 4 Nov 16:24 wp-fail2ban.php -> ../plugins/wp-fail2ban-
premium/wp-fail2ban.php
```

This has the advantage that you can update WPf2b as usual without having to update mu-plugins directly. For the free version you don't need to activate WPf2b, but you do for the Premium version.

# 4.4.2 Forcing Usage

The main objective here is to stop people fiddling with things, so there are necessarily some restrictions on configuring *WPf2b*.

WPf2b must be configured in wp-config.php - you can't use the Premium config UI; not only does it make no sense, it won't work<sup>2</sup>.

The actual configuration itself is simple; for the **Free** version:

- 1. Extract the **Free** version of WPf2b into a directory called wp-fail2ban within mu-plugins.
- 2. symlink wp-fail2ban.php:

```
# ln -s wp-fail2ban/wp-fail2ban.php
# ls -l
total 1
lrwxr-xr-x 1 www www 38 4 Nov 16:24 wp-fail2ban.php -> wp-fail2ban/wp-fail2ban.

php
```

3. Keep WPf2b up-to-date.

For the **Premium** version:

- 1. Extract the **Premium** version of WPf2b into a directory called wp-fail2ban-premium within mu-plugins.
- 2. symlink wp-fail2ban.php:

<sup>&</sup>lt;sup>1</sup> For example, WordFence, which assumes it's the only one.

<sup>&</sup>lt;sup>2</sup> It may look like it works now, but in a future release it will be blocked.

3. **Keep** WPf2b **up-to-date**.

### Keeping WPf2b up-to-date

It's that last step that catches out most people - WordPress doesn't check mu-plugins for updates, so by configuring WPf2b in this way **you are taking responsibility** for keeping WPf2b up-to-date. I do my best, but I cannot guarantee there will never be a critical problem with WPf2b - you and you alone are responsible for checking for updates and installing them.

Usage

# 5.1 Event Log



# **5.2 Report: Events by Country**



18 Chapter 5. Usage

Add-ons

Gravity Forms

20 Chapter 6. Add-ons

Developers

New in version 4.2.

Version 4.2 introduced the ability for 3rd-party plugins to integrate with WPf2b.

# 7.1 Overview

The basic steps are:

# 7.1.1 Register Plugin

### **Description**

### **Usage**

```
try {
    do_action('wp_fail2ban_register_plugin', 'my-plugin-slug', 'My Plugin Name');
} catch(\LengthException $e) {
    // slug or name too long
} catch(\RuntimeException $e) {
    // database error
}
```

### **Parameters**

```
wp_fail2ban_register_plugin WPf2b action.
```

my-plugin-slug The plugin slug to register. Must be < 256 chars.

My Plugin Name The display name of the plugin being registered. Must be < 256 chars.

### **Exceptions**

**LengthException** Either the slug or name is too long.

### 7.1.2 Register Message

#### **Example**

```
$args = [
       'slug'
2
                      => 'my-plugin-msg-slug-1',
       'fail'
                      => 'hard',
3
       'priority'
                      => LOG_NOTICE,
4
       'event_class' => 'Password',
       'event_id' \Rightarrow 0x001F,
       'message' => 'My message with ___VAR1__ and ___VAR2___',
'vars' => [
           'VAR1' => '\d+',
            'VAR2' => '*.'
10
       ]
11
   ];
12
13
   try {
       do_action('wp_fail2ban_register_message', 'my-plugin-slug', $args);
14
   } catch(\InvalidArgumentException $e) {
15
       // Missing entry or invalid type
16
   } catch(\UnexpectedValueException $e) {
17
       // Invalid value
18
```

#### **Details**

#### do\_action

```
wp_fail2ban_register_message WPf2b action.
```

my-plugin-slug The plugin slug used in Register Plugin.

#### \$args

slug Message slug.

fail Recommended action.

**priority** syslog priority to use. Only the following priorities are supported:

- LOG\_CRIT
- LOG\_ERR
- LOG\_WARNING
- LOG\_NOTICE
- LOG\_INFO
- LOG\_DEBUG

event\_class Class of Event. This is one of:

**Auth** Authentication-related Events. Note that Blocking Events will have their own class in the future.

**Comment** Comment-related Events.

XMLRPC XML-RPC-related Events.

**Password** Password-releated Events.

**REST** REST API-related Events.

**Spam** Spam-related Events.

event id Event ID - 16 bits you can do with as you please.

message Message with substitutions. Note that "from <IP>" is appended.

vars An array of substitutions mapped to regular expressions.

When logging a message the substitutions are checked and substituted if present. The regex will be used to generate a matching rule for *fail2ban*.

### 7.1.3 Log Message

### 7.1.4 Design

To allow 3rd-party plugins to add support for WPf2b more easily, the API uses actions. This avoids the need to check if WPf2b is installed, then import a file, check for versions, and so on. Integration code can be written that will work if WPf2b is installed, and do nothing if not.

**Note:** Because do action has no return value WPf2b will throw an Exception if there is an error.

# 7.2 Example

```
2
3
   function myplugin_wpf2b_register()
4
5
        // Register the plugin
6
       try {
7
            do_action('wp_fail2ban_register_plugin', 'my-plugin-slug', 'My Plugin Name');
       } catch(\LengthException $e) {
9
            // slug or name too long
10
       } catch(\RuntimeException $e) {
11
12
            // database error
13
14
       // Register a message
15
       $args = [
16
            'slug'
                          => 'my-plugin-msg-slug-1',
17
                          => 'hard',
            'fail'
18
                        => LOG_NOTICE,
            'priority'
19
            'event_class' => 'Password',
20
            'event_id'
                        => 0x001F,
21
                          => 'My message with ____VAR1___ and ____VAR2____',
            'message'
22
                          => [
            'vars'
23
                'VAR1' => '\d+',
```

(continues on next page)

7.2. Example 23

(continued from previous page)

```
'VAR2' => '*.'
25
            ]
26
       ];
27
       try {
28
            do_action('wp_fail2ban_register_message', 'my-plugin-slug', $args);
29
        } catch(\InvalidArgumentException $e) {
30
           // Missing entry or invalid type
31
        } catch(\UnexpectedValueException $e) {
32
            // Invalid value
33
34
35
   add_action('wp_fail2ban_register', __NAMESPACE__.'\myplugin_wpf2b_register');
38
   /**
39
40
   function myplugin_foobar()
41
42
43
        vars = [
            'VAR1' => 12345,
44
            'VAR2' => 'xyz'
45
       ];
46
       do_action('my-plugin-slug', 'my-plugin-msg-slug-1', $vars);
47
```

# Release Notes

# 8.1 4.3.0

- Add new dashboard widget: last 5 syslog messages.
- Add full multisite support.
- Add username login blocking (force login with email).
- Add separate logging for login attempts with an empty username.
- Improve user enumeration blocking compatibility with the WordPress block editor (Gutenberg).
- Bump the minimum PHP version to 5.6.

### 8.1.1 Patches

#### 4.3.0.1

### **Premium Only**

• Fix issue when WP\_FAIL2BAN\_BLOCK\_USERNAME\_LOGIN enabled and WP\_FAIL2BAN\_BLOCKED\_USERS not configured.

#### 4.3.0.2

### **Premium Only**

• Fix issue where some events weren't logged.

#### 4.3.0.3

### **Premium Only**

- Fix incorrect total for Event Log.
- Fix database renumber for Pingbacks.

#### 4.3.0.4

- Fix plugin event registration.
- Add colour to "Last 5 Messages" dashboard widget.

#### 4.3.0.5

- Fix empty username detection for multisite.
- Fix harmless warning when activating new multisite install.
- Fix esoteric edge-case where wp-load.php is loaded via a script run from the CLI in a directory with a functions.php file.

#### 4.3.0.6

• Fix Forbidden error on Posts page for roles below Editor when user enum blocking enabled. [WordPress only]

#### 4.3.0.7

• Finish refactoring to allow inclusion of constants in wp-config.php (h/t @iCounsellor).

### **Premium Only**

• Fix MaxMind database update.

## 8.1.2 Upgrade

To take advantage of the new features you will need up update your *fail2ban* filters; existing filters will continue to work as before.

#### **Premium Users**

Please backup your database before upgrading.

#### 4.3.0.7

#### **Premium Users**

Please update your MaxMind database.

define() Constants

## 9.1 All

### 9.1.1 WP FAIL2BAN AUTH LOG

New in version 2.2.0.

By default, *WPf2b* uses **LOG\_AUTH** for logging authentication success or failure. If you'd like to use a different log add the following to wp-config.php:

```
define('WP_FAIL2BAN_AUTH_LOG', LOG_LOCAL5);
```

Be sure to change the Facility to the one you're using.

#### See also:

• WP\_FAIL2BAN\_USE\_AUTHPRIV

### 9.1.2 WP FAIL2BAN BLOCKED USERS

New in version 2.0.0.

The bots that try to brute-force WordPress logins aren't that clever (no doubt that will change), but they may only make one request per IP every few hours in an attempt to avoid things like *fail2ban*. With large botnets this can still create significant load.

Based on a suggestion from @jmadea, WPf2b now allows you to specify a regex that will shortcut the login process if the requested username matches.

For example, putting the following in wp-config.php:

```
define('WP_FAIL2BAN_BLOCKED_USERS', '^admin$');
```

will block any attempt to log in as **admin** before most of the core WordPress code is run. Unless you go crazy with it, a regex is usually cheaper than a call to the database so this should help keep things running during an attack.

WPf2b doesn't do anything to the regex other than make it case-insensitive.

If you're running PHP 7, you can now specify an array of users instead:

```
define('WP_FAIL2BAN_BLOCKED_USERS', ['admin', 'another', 'user']);
```

## 9.1.3 WP\_FAIL2BAN\_BLOCK\_USERNAME\_LOGIN

New in version 4.3.0.

```
define('WP_FAIL2BAN_BLOCK_USERNAME_LOGIN', true);
```

### 9.1.4 WP FAIL2BAN BLOCK USER ENUMERATION

New in version 2.1.0.

Changed in version 4.0.0: Now also blocks enumeration via the REST API.

Brute-forcing WP requires knowing a valid username. Unfortunately, WP makes this all but trivial.

Based on a suggestion from @geeklol and a plugin by @ROIBOT, WPf2b can now block user enumeration attempts. Just add the following to wp-config.php:

```
define('WP_FAIL2BAN_BLOCK_USER_ENUMERATION', true);
```

# 9.1.5 WP\_FAIL2BAN\_COMMENT\_EXTRA\_LOG

New in version 4.0.5.

Default: LOG\_AUTH

```
define('WP_FAIL2BAN_COMMENT_EXTRA_LOG', LOG_LOCAL5);
```

#### See also:

• WP\_FAIL2BAN\_USE\_AUTHPRIV

## 9.1.6 WP FAIL2BAN COMMENT LOG

New in version 3.5.0.

By default, *WPf2b* uses **LOG\_USER** for logging comments. If you'd rather it used a different facility you can change it by adding something like the following to wp-config.php:

```
define('WP_FAIL2BAN_COMMENT_LOG', LOG_LOCAL3);
```

#### See also:

- WP FAIL2BAN LOG COMMENTS
- WP\_FAIL2BAN\_LOG\_COMMENTS\_EXTRA

## 9.1.7 WP FAIL2BAN DISABLE LAST LOG

New in version 4.3.0.

WPf2b v4.3.0 introduced a new dashboard widget to display the last 5 syslog messages.

These messages are stored in the options table; for most sites this won't be an issue, but, if you're already doing a lot of updates to the options table or have some other esoteric configuration, you might want to disable this feature:

define('WP\_FAIL2BAN\_DISABLE\_LAST\_LOG', true);

### 9.1.8 WP FAIL2BAN EX BLOCK COUNTRIES

## **Premium Only**

New in version 4.3.2.0.

### 9.1.9 WP FAIL2BAN EX BLOCK COUNTRIES LOG

### **Premium Only**

New in version 4.3.2.0.

## 9.1.10 WP FAIL2BAN EX LOG HEADERS

#### **Premium Only**

New in version 4.3.0.

Lorem

define('WP\_FAIL2BAN\_EX\_LOG\_HEADERS', true);

### 9.1.11 WP FAIL2BAN EX LOG POST DATA

### **Premium Only**

New in version 4.3.0.

Lorem

define('WP\_FAIL2BAN\_EX\_LOG\_POST\_DATA', true);

### 9.1.12 WP\_FAIL2BAN\_EX\_LOG\_REFERER

#### **Premium Only**

New in version 4.3.0.

Lorem

9.1. All 29

define('WP\_FAIL2BAN\_EX\_LOG\_REFERER', true);

## 9.1.13 WP\_FAIL2BAN\_EX\_LOG\_URL

### **Premium Only**

New in version 4.3.0.

Lorem

define('WP\_FAIL2BAN\_EX\_LOG\_URL', true);

### 9.1.14 WP FAIL2BAN EX LOG USER AGENT

### **Premium Only**

New in version 4.3.0.

Lorem

define('WP\_FAIL2BAN\_EX\_LOG\_USER\_AGENT', true);

## 9.1.15 WP\_FAIL2BAN\_EX\_MAXMIND\_LICENSE

### **Premium Only**

New in version 4.3.0.

Lorem

define('WP\_FAIL2BAN\_EX\_MAXMIND\_LICENSE', true);

## 9.1.16 WP\_FAIL2BAN\_EX\_PROXY\_CLOUDFLARE

New in version 4.3.2.0.

## 9.1.17 WP FAIL2BAN EX XMLRPC BLOCKED

New in version 4.3.2.0.

## 9.1.18 WP\_FAIL2BAN\_EX\_XMLRPC\_JETPACK

New in version 4.3.2.0.

## 9.1.19 WP\_FAIL2BAN\_EX\_XMLRPC\_LOG

New in version 4.3.2.0.

# 9.1.20 WP\_FAIL2BAN\_EX\_XMLRPC\_TRUSTED\_IPS

New in version 4.3.2.0.

### 9.1.21 WP FAIL2BAN FREE ONLY

New in version 4.4.0.

Hide Freemius interface:

define('WP\_FAIL2BAN\_FREE\_ONLY', true);

# 9.1.22 WP\_FAIL2BAN\_HTTP\_HOST

New in version 3.0.0.

This is for some flavours of Linux where WP\_FAIL2BAN\_SYSLOG\_SHORT\_TAG isn't enough.

If you configure your web server to set an environment variable named **WP\_FAIL2BAN\_SYSLOG\_SHORT\_TAG** on a per-virtual host basis, *WPf2b* will use that in the syslog tag. This allows you to configure a unique tag per site in a way that makes sense for your configuration, rather than some arbitrary truncation or hashing within the plugin.

**Note:** This feature has not been tested as extensively as others. While I'm confident it works, FreeBSD doesn't have this problem so this feature will always be second-tier.

# 9.1.23 WP\_FAIL2BAN\_LOG\_COMMENTS

New in version 3.5.0.

WPf2b can now log comments. To enable this feature, add the following to wp-config.php:

```
define('WP_FAIL2BAN_LOG_COMMENTS', true);
```

The comment ID and IP will be written to WP\_FAIL2BAN\_COMMENT\_LOG and matched by wordpress-extra.conf.

#### See also:

• WP\_FAIL2BAN\_COMMENT\_LOG

# 9.1.24 WP\_FAIL2BAN\_LOG\_COMMENTS\_EXTRA

New in version 4.0.0.

WPf2b can optionally log the following comment-related events:

Not found Attempted comment on a non-existent post

### WPF2B\_EVENT\_COMMENT\_NOT\_FOUND

**Closed** Attempted comment on a post with closed comments

#### WPF2B EVENT COMMENT CLOSED

**Trash** Attempted comment on a post in Trash

```
WPF2B EVENT COMMENT TRASH
```

**Draft** Attempted comment on a Draft post

```
WPF2B_EVENT_COMMENT_DRAFT
```

Password-protected Attempted comment on a password-protected post

# WPF2B\_EVENT\_COMMENT\_PASSWORD

To enable this feature OR the event constants; for example, to enable Closed and Draft:

```
define('WP_FAIL2BAN_LOG_COMMENTS_EXTRA', WPF2B_EVENT_COMMENT_CLOSED | WPF2B_EVENT_

→COMMENT_DRAFT);
```

You **must** also load the constants *before* trying to use them. In *wp-config.php* add:

```
include __DIR__.'/wp-content/plugins/wp-fail2ban/lib/constants.php';
```

or for the Premium version:

```
include __DIR__.'/wp-content/plugins/wp-fail2ban-premium/lib/constants.php';
```

If you have non-standard paths, e.g. plugins in a different place, you'll need to adjust the include path to suit.

The Post ID and IP will be written to WP\_FAIL2BAN\_COMMENT\_LOG and matched by wordpress-extra.conf.

# 9.1.25 WP FAIL2BAN LOG PASSWORD REQUEST

New in version 3.5.0.

*WPf2b* can log password reset requests. Add the following to wp-config.php:

```
define('WP_FAIL2BAN_LOG_PASSWORD_REQUEST', true);
```

The username and IP will be written to WP\_FAIL2BAN\_PASSWORD\_REQUEST\_LOG and matched by wordpress-extra.conf.

### 9.1.26 WP FAIL2BAN LOG PINGBACKS

New in version 2.2.0.

Based on a suggestion from @maghe, WPf2b can now log pingbacks. To enable this feature, add the following to wp-config.php:

```
define('WP_FAIL2BAN_LOG_PINGBACKS', true);
```

By default, *WPf2b* uses **LOG\_USER** for logging pingbacks. If you'd rather it used a different facility you can change it by adding something like the following to wp-config.php:

define('WP\_FAIL2BAN\_PINGBACK\_LOG', LOG\_LOCAL3);

# 9.1.27 WP FAIL2BAN LOG SPAM

New in version 3.5.0.

WPf2b can now log spam comments. To enable this feature, add the following to wp-config.php:

```
define('WP_FAIL2BAN_LOG_SPAM', true);
```

The comment ID and IP will be written to WP\_FAIL2BAN\_SPAM\_LOG and matched by wordpress-hard.conf.

#### See also:

• WP\_FAIL2BAN\_SPAM\_LOG

# 9.1.28 WP FAIL2BAN OPENLOG OPTIONS

New in version 3.5.0.

# 9.1.29 WP\_FAIL2BAN\_PASSWORD\_REQUEST\_LOG

New in version 4.0.0.

# 9.1.30 WP FAIL2BAN PINGBACK ERROR LOG

New in version 4.0.5: Reserved for future use.

Default: LOG\_AUTH

define('WP\_FAIL2BAN\_PINGBACK\_ERROR\_LOG', LOG\_LOCAL3);

# 9.1.31 WP\_FAIL2BAN\_PINGBACK\_LOG

New in version 2.2.0.

See WP\_FAIL2BAN\_LOG\_PINGBACKS.

## 9.1.32 WP FAIL2BAN PLUGIN AUTH LOG

New in version 4.2.0.

Facility for "Auth" class plugin messages.

#### See also:

- WP\_FAIL2BAN\_PLUGIN\_LOG\_AUTH
- Facilities

# 9.1.33 WP FAIL2BAN PLUGIN COMMENT LOG

New in version 4.2.0.

Facility for "Comment" class plugin messages.

#### See also:

- WP\_FAIL2BAN\_PLUGIN\_LOG\_COMMENT
- Facilities

# 9.1.34 WP\_FAIL2BAN\_PLUGIN\_LOG\_AUTH

New in version 4.2.0.

To enable logging plugin "Auth" class messages, add the following to wp-config.php:

```
define('WP_FAIL2BAN_PLUGIN_LOG_AUTH', true);
```

#### See also:

- WP\_FAIL2BAN\_PLUGIN\_AUTH\_LOG
- WP\_FAIL2BAN\_USE\_AUTHPRIV

# 9.1.35 WP\_FAIL2BAN\_PLUGIN\_LOG\_COMMENT

New in version 4.2.0.

To enable logging plugin "Comment" class messages, add the following to wp-config.php:

```
define('WP_FAIL2BAN_PLUGIN_LOG_COMMENT', true);
```

#### See also:

• WP\_FAIL2BAN\_PLUGIN\_COMMENT\_LOG

# 9.1.36 WP\_FAIL2BAN\_PLUGIN\_LOG\_OTHER

New in version 4.2.0.

To enable logging plugin "Other" class messages, add the following to wp-config.php:

```
define('WP_FAIL2BAN_PLUGIN_LOG_OTHER', true);
```

#### See also:

• WP\_FAIL2BAN\_PLUGIN\_OTHER\_LOG

# 9.1.37 WP\_FAIL2BAN\_PLUGIN\_LOG\_PASSWORD

New in version 4.2.0.

To enable logging plugin "Password" class messages, add the following to wp-config.php:

define('WP\_FAIL2BAN\_PLUGIN\_LOG\_PASSWORD', true);

#### See also:

• WP\_FAIL2BAN\_PLUGIN\_PASSWORD\_LOG

# 9.1.38 WP\_FAIL2BAN\_PLUGIN\_LOG\_REST

New in version 4.2.0.

To enable logging plugin "REST" class messages, add the following to wp-config.php:

```
define('WP_FAIL2BAN_PLUGIN_LOG_REST', true);
```

#### See also:

• WP\_FAIL2BAN\_PLUGIN\_REST\_LOG

# 9.1.39 WP\_FAIL2BAN\_PLUGIN\_LOG\_SPAM

New in version 4.2.0.

To enable logging plugin "Spam" class messages, add the following to wp-config.php:

```
define('WP_FAIL2BAN_PLUGIN_LOG_SPAM', true);
```

#### See also:

- WP\_FAIL2BAN\_PLUGIN\_SPAM\_LOG
- WP\_FAIL2BAN\_USE\_AUTHPRIV

## 9.1.40 WP FAIL2BAN PLUGIN LOG XMLRPC

New in version 4.2.0.

To enable logging plugin "XMLRPC" class messages, add the following to wp-config.php:

```
define('WP_FAIL2BAN_PLUGIN_LOG_XMLRPC', true);
```

#### See also:

• WP\_FAIL2BAN\_PLUGIN\_XMLRPC\_LOG

# 9.1.41 WP\_FAIL2BAN\_PLUGIN\_OTHER\_LOG

New in version 4.2.0.

Facility for "Other" class plugin messages.

#### See also:

- WP FAIL2BAN PLUGIN LOG OTHER
- Facilities

# 9.1.42 WP\_FAIL2BAN\_PLUGIN\_PASSWORD\_LOG

New in version 4.2.0.

Facility for "Password" class plugin messages.

#### See also:

- WP\_FAIL2BAN\_PLUGIN\_LOG\_PASSWORD
- Facilities

# 9.1.43 WP\_FAIL2BAN\_PLUGIN\_REST\_LOG

New in version 4.2.0.

Facility for "REST" class plugin messages.

#### See also:

- WP FAIL2BAN PLUGIN LOG REST
- Facilities

# 9.1.44 WP\_FAIL2BAN\_PLUGIN\_SPAM\_LOG

New in version 4.2.0.

Facility for "Spam" class plugin messages.

#### See also:

- WP\_FAIL2BAN\_PLUGIN\_LOG\_SPAM
- Facilities

# 9.1.45 WP FAIL2BAN PLUGIN XMLRPC LOG

New in version 4.2.0.

Facility for "XML-RPC" class plugin messages.

#### See also:

- WP\_FAIL2BAN\_PLUGIN\_LOG\_XMLRPC
- Facilities

# 9.1.46 WP\_FAIL2BAN\_PROXIES

New in version 2.0.0.

Changed in version 4.0.0: Entries can be ignored by prefixing with #

The idea here is to list the IP addresses of the trusted proxies that will appear as the remote IP for the request. When defined:

• If the remote address appears in the WP\_FAIL2BAN\_PROXIES list, WPf2b will log the IP address from the X-Forwarded-For header

- If the remote address does not appear in the WP\_FAIL2BAN\_PROXIES list, WPf2b will return a 403 error
- If there's no X-Forwarded-For header, WPf2b will behave as if WP\_FAIL2BAN\_PROXIES isn't defined

To set WP\_FAIL2BAN\_PROXIES, add something like the following to wp-config.php:

```
define('WP_FAIL2BAN_PROXIES','192.168.0.42,192.168.42.0/24');
```

WPf2b doesn't do anything clever with the list - beware of typos!

If you're running PHP 7 you can use an array instead:

```
define('WP_FAIL2BAN_PROXIES', [
    '192.168.0.42',
    '192.168.42.0/24'
]);
```

# 9.1.47 WP FAIL2BAN REMOTE ADDR

New in version 3.6.0.

Some themes and plugins anonymise requests

# 9.1.48 WP\_FAIL2BAN\_REST API

#### Premium feature.

New in version 4.3.0.

*WPf2b* now has a RESTful API for remote configuration and monitoring. To enable this feature, add the following to wp-config.php:

```
define('WP_FAIL2BAN_REST_API', true);
```

You must also define WP\_FAIL2BAN\_REST\_SECRET.

#### See also:

• WP\_FAIL2BAN\_REST\_SECRET

# 9.1.49 WP\_FAIL2BAN\_REST\_SECRET

#### Premium feature.

New in version 4.3.0.

*WPf2b* now has a RESTful API for remote configuration and monitoring. To enable this feature, add the following to wp-config.php:

#### Warning:

1. The Secret must be random data.

- The Secret must be at least 64 characters long.
- 3. The Secret **must be unique**.

You will compromise the security of your site if you fail to follow these rules.

#### See also:

WP\_FAIL2BAN\_REST\_API

### 9.1.50 WP FAIL2BAN SPAM LOG

New in version 4.0.0.

#### See also:

• WP FAIL2BAN USE AUTHPRIV

# 9.1.51 WP\_FAIL2BAN\_SYSLOG\_SHORT\_TAG

New in version 3.0.0.

Some flavours of Linux come with a *syslogd* that can't cope with the normal message format *WPf2b* uses; basically, they assume that the first part of the message (the tag) won't exceed some (small) number of characters, and mangle the message if it does. This breaks the regex in the *fail2ban* filter and so nothing gets blocked.

#### Adding:

```
define('WP_FAIL2BAN_SYSLOG_SHORT_TAG', true);
```

to functions.php will make WPf2b use wp as the syslog tag, rather than the normal wordpress. This buys you 7 characters which may be enough to work around the problem, but if it's not enough you should look at WP\_FAIL2BAN\_HTTP\_HOST or WP\_FAIL2BAN\_TRUNCATE\_HOST too.

## 9.1.52 WP FAIL2BAN TRUNCATE HOST

New in version 3.5.0.

If you've set WP\_FAIL2BAN\_SYSLOG\_SHORT\_TAG and defining WP\_FAIL2BAN\_HTTP\_HOST for each virtual host isn't appropriate, you can set WP\_FAIL2BAN\_TRUNCATE\_HOST to whatever value you need to make syslog happy:

```
define('WP_FAIL2BAN_TRUNCATE_HOST', 8);
```

This does exactly what the name suggests: truncates the host name to the length you specify. As a result there's no guarantee that what's left will be enough to identify the site.

# 9.1.53 WP FAIL2BAN USE AUTHPRIV

New in version 4.4.0.

By default, *WPf2b* uses **LOG\_AUTH** for logging various events. However, some systems use **LOG\_AUTHPRIV** instead, but there's no good run-time way to tell. If your system uses **LOG\_AUTHPRIV** you should add the following to wp-config.php:

```
define('WP_FAIL2BAN_USE_AUTHPRIV', true);
```

Note: This only changes the **default** use of **LOG\_AUTH** - it doesn't override individual settings.

#### See also:

• Logfile Reference

# 9.1.54 WP\_FAIL2BAN\_XMLRPC\_LOG

New in version 3.6.0.

This is for debugging and future development.

Attackers are doing weird things with XML-RPC, so this logs the raw post data to the file specified:

```
define('WP_FAIL2BAN_XMLRPC_LOG', '/var/log/xml-rpc.log');
```

- 9.2 Logging
- 9.2.1 Premium
- 9.3 syslog
- 9.4 Block
- 9.4.1 Premium
- 9.5 Remote IPs
- 9.5.1 Premium
- 9.6 Plugins
- 9.7 Miscelaneous

9.2. Logging 39

# **Facilities**

While the full list of facilities is reproduced here for completeness, using anything but LOG\_AUTH, LOG\_AUTHPRIV, and/or LOG\_LOCAL0..7 is unlikely to have the desired results. LOG\_USER can be used for Notices, but Info messages are generally not saved.

Facility	Description
LOG_AUTH	security/authorization messages (use LOG_AUTHPRIV instead in systems where that con-
	stant is defined)
LOG_AUTHPRIV	security/authorization messages (private)
LOG_CRON	clock daemon (cron and at)
LOG_DAEMON	other system daemons
LOG_KERN	kernel messages
LOG_LOCAL07	reserved for local use, these are not available in Windows
LOG_LPR	line printer subsystem
LOG_MAIL	mail subsystem
LOG_NEWS	USENET news subsystem
LOG_SYSLOG	messages generated internally by syslogd
LOG_USER	generic user-level messages
LOG_UUCP	UUCP subsystem

# Logfile Reference

OS	Level	LOG_AUTH	LOG_AUTHPRIV	LOG_USER
CentOS 7		(not used)	/var/log/	
			secure	
FeeBSD	INFO	/var/log/	/var/log/	•
		auth/log	auth/log	
	NOTICE	/var/log/	/var/log/	/var/log/
		auth/log	auth/log	messages
Ubuntu 18	(all)	/var/log/	/var/log/	/var/log/
		auth.log	auth.log	syslog

# **Default Facilities**

Define	Facility
WP_FAIL2BAN_AUTH_LOG	LOG_AUTH
WP_FAIL2BAN_COMMENT_EXTRA_LOG	LOG_AUTH
WP_FAIL2BAN_COMMENT_LOG	LOG_USER
WP_FAIL2BAN_PASSWORD_REQUEST_LOG	LOG_USER
WP_FAIL2BAN_PINGBACK_ERROR_LOG	LOG_AUTH
WP_FAIL2BAN_PINGBACK_LOG	LOG_USER
WP_FAIL2BAN_PLUGIN_AUTH_LOG	LOG_AUTH
WP_FAIL2BAN_PLUGIN_COMMENT_LOG	LOG_USER
WP_FAIL2BAN_PLUGIN_OTHER_LOG	LOG_USER
WP_FAIL2BAN_PLUGIN_PASSWORD_LOG	LOG_USER
WP_FAIL2BAN_PLUGIN_REST_LOG	LOG_USER
WP_FAIL2BAN_PLUGIN_SPAM_LOG	LOG_AUTH
WP_FAIL2BAN_PLUGIN_XMLRPC_LOG	LOG_USER
WP_FAIL2BAN_SPAM_LOG	LOG_AUTH
WP_FAIL2BAN_XMLRPC_LOG	LOG_USER

# 12.1 Premium

Filter Files

# 13.1 wordpress-hard.conf

```
# Fail2Ban filter for WordPress hard failures
# Auto-generated: 2019-04-18T14:45:30+00:00
[INCLUDES]
before = common.conf
[Definition]
_daemon = (?:wordpress|wp)
failregex = ^%(__prefix_line)sAuthentication attempt for unknown user .* from <HOST>$
            ^%(__prefix_line)sREST authentication attempt for unknown user .* from
→<HOST>$
            ^%(__prefix_line)sXML-RPC authentication attempt for unknown user .* from
→<HOST>$
            ^%(__prefix_line)sSpam comment \d+ from <HOST>$
            ^%(__prefix_line)sBlocked user enumeration attempt from <HOST>$
            ^%(__prefix_line)sBlocked authentication attempt for .* from <HOST>$
            ^%(__prefix_line)sXML-RPC multicall authentication failure from <HOST>$
            ^%(__prefix_line)sPingback error .* generated from <HOST>$
ignoreregex =
# DEV Notes:
# Requires the 'WP fail2ban' plugin:
# https://wp-fail2ban.com/
# Author: Charles Lecklider
```

# 13.2 wordpress-soft.conf

# 13.3 wordpress-extra.conf

```
# Fail2Ban filter for WordPress extra failures
# Auto-generated: 2019-04-18T14:45:30+00:00
[INCLUDES]
before = common.conf
[Definition]
_daemon = (?:wordpress|wp)
failregex = ^%(__prefix_line)sComment \d+ from <HOST>$
            ^%(__prefix_line)sComment post not found d+ from < HOST > $
            ^%(__prefix_line)sComments closed on post \d+ from <HOST>$
            % (\underline{\underline{}} prefix_line) sComment attempt on trash post \d+ from <HOST>$
            ^%(__prefix_line)sComment attempt on draft post \d+ from <HOST>$
            ^%(__prefix_line)sComment attempt on password-protected post \d+ from
→<HOST>$
            ^%(__prefix_line)sPassword reset requested for .* from <HOST>$
ignoreregex =
# DEV Notes:
# Requires the 'WP fail2ban' plugin:
# https://wp-fail2ban.com/
```

(continues on next page)

(continued from previous page)

#

# Author: Charles Lecklider