



phpBB Versus Spam

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What is spam?

- Anything you don't want on your board
 - Registration spammers
 - Posting spammers
 - PM spammers



Three Lines of Defense

- Prevention
 - Keep spammers from introducing content
- Detection
 - Quickly recognize when your board has been hit
- Elimination
 - Get rid of it as efficiently and completely as possible





Prevention

- Goal: To eliminate automated user registrations without making it too difficult for desirable new members to join your board





Bot Philosophy

- I am only as smart and creative as my creator
- I don't have the intelligence to code for much of anything outside of the standard...
- ... but I can check a few things



Preventing Registration Spam

- Make your registration process unique
 - Do something different! Anything helps...
- What about activation?
 - None is useless as a reg-bot prevention method
 - User can easily be handled by bots
 - At least it makes sure the user enters a valid address
 - Admin is too time consuming



Case Study: Bot Behavior

- Wordpress Blog was being hit with 20+ spam comments **per hour**
- Akismet used to quarantine comments
 - Still had review the queue in case of valid comments
 - Burden was on me rather than the spammer



Case Study: Bot Behavior

- Added a single checkbox to the comment form
 - Required to mark the box to confirm a comment
 - Comments without a marked checkbox were ignored
- Stopped a portion of the spam but some bots clicked the box



Case Study: Bot Behavior

- Randomly designated one of four

Confirm submission by clicking **only** the marked checkbox:

* *

Submit Comment

- Required to mark exactly one checkbox
- Comments were ignored if:
 - The proper box was not marked
 - More than one box was marked
- Every attempt was logged
- After a few months what had the bots done?





Case Study: Bot Behavior

- Bots either:
 - Ignored the designated box (left it blank)
 - Marked every box
- The second behavior was important
 - The first bot coder wrote for standard Wordpress
 - The second bot coder was smart enough to have his bot **scan** the form but not **read** the form
 - In order to process the form the bot simply “clicked” every box present on the form





Blog Comments Results

- Comments processed since 2007-08-01

Result Code	Record Count	Percent of Total
Pass	143	0.2%
Fail: No marks	63803	83.8%
Fail: All marks	12198	16.0%
	76144	





phpBB2 Registration Results

- Registrations since 2007-04-17

Result Code	Record Count	Percent of Total
Pass	17684	59.5%
Fail: No marks	7108	23.9%
Fail: All marks	4943	16.6%
	29735	



Site Comment Form Results

- Comments handled since 2008-03-31

Result Code	Record Count	Percent of Total
Pass	65	1.2%
Fail: No Marks	359	6.6%
Fail: All Marks	5044	92.2%
	5468	

- Note: comment form is named comment.php so it appears to be an obvious target



Improvements in phpBB3

- Much better CAPTCHA
 - phpBB2 CAPTCHA has been broken by bots for years
- Other improvements
 - Custom profile fields
 - Profiles and member lists hidden by default
 - Reduces the attractiveness to spammers
 - Registration process does not include web site or other targets attractive to spammers
- All of these items required MODs for phpBB2





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Detecting Spam Content

- Goal: To make it easy to identify spam content





Does it Look Like Spam?

- Hardest task to automate
 - Some MODs try to identify spam words
 - Some spam posts look real
 - Some real content may look like spam
- Ultimately this task is probably best left to an active moderator team



Improvements in phpBB3

- Report This Post
 - Turns each user into a potential moderator



- Members can forward PMs





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Eliminating Spam Content

- Goal: To make it easy to quickly and completely remove unwanted content





Spam Cleanup Scenarios

- User is registered but not activated
- User is activated but never logged in
- User logged in and posted only spam
- User logged in and posted “accidental” spam



User Registered But Inactive

- phpBB2
 - No standard features
 - Can add MODs to hide inactive users or easily delete multiple users at once
- phpBB3 is much improved
 - Admin panel offers list of inactive users
 - User IP is recorded on registration
 - Inactive users not shown on memberlist





User Active, Never Logged In

- Look like regular users that have completed the registration process
 - They just have not bothered to log in
 - May not be easily identified as spammers



User Posted Only Spam

- phpBB3 Improvements
 - Report a post for quick attention
 - Option to move all user posts into the “Trash” in one operation is very nice



The screenshot shows a user management interface with a 'Basic tools' section. Under 'Quick tools:', there is a 'Delete user:' section with a warning: 'Please note that deleting a user is final, they cannot be recovered.' To the right, a dropdown menu is open, listing various actions: 'Select option', 'Ban by username', 'Ban by e-mail', 'Ban by IP', 'Deactivate account', 'Delete signature', 'Delete avatar', 'Move all posts' (highlighted), 'Delete all posts', 'Delete all attachments', and 'Force reactivation'. At the bottom of the interface, there is a footer: 'Powered by phpBB © 2000, 2002, 2005, 2007'.





User Posted Accidental Spam

- A regular user might have forgotten a rule and posted something considered spam
- phpBB3 offers options to handle this
 - Allow moderator team to keep track of rules violations with user notes
 - Frequent (or infrequent) violations can lead to a temporary ban





Improvements in phpBB3

- There are dozens of anti-spam MODs for phpBB2, none of which seem to be needed for phpBB3





phpBB3 Looks Good But...

- Once phpBB3 achieves majority market share it will likely become more of a target
- The battle against spammers is ongoing



One Creative Spammer

- Adding “fake” signatures to a post

Posted: Thu Jun 26, 2008 4:05 am
Post subject: Need to recover files on FAT16?

[Quote](#) [Edit](#) [Delete](#) [IP](#)

Hi people, I have a system that has FAT16 file system on it. I have that file system on that for some reason so I don't need to upgrade on that...but recently I had some files deleted and now I need to get them back. They are important for my official use and hold great importance. I know that there is software for recovery but since I have a FAT16 file system I guess that all won't work on that.

Please let me know the solution for this problem.

[water tank seo uk](#)





Another Creative Spammer

- Content appears to be on-topic
- Signature looks like spam but at least it isn't fake like the prior example
- Google search finds the same text posted on dozens of other boards
- Takes a bit more research to identify





Three Lines of Defense

- Prevention
- Detection
- Elimination

- phpBB3 FTW 😊

