Securing Your WordPress Website

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Why?

Confidentiality
Integrity
Availability

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Why?

Why does a hacker bother with me?

ALL Websites are attacked - $$$$$

- Traffic/Pharma/Affiliate
- Blackhat SEO - Link Injection
- Hacktivism - Defacements
- Drive-by Downloads
- Malicious Redirects
- Hidden Pages
- Email Spam
- Resources - Bandwidth - Storage

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Where Are The Weaknesses?

Leaked Passwords
Software Vulnerabilities
Hosting

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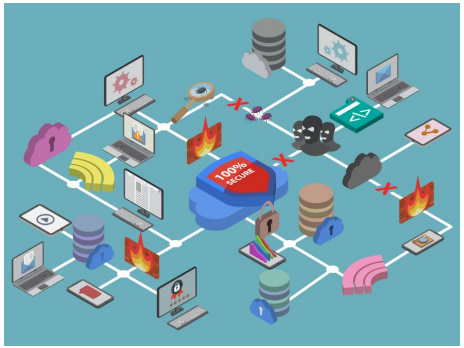
Where Are The Weaknesses?



- Leaked Passwords
  - Public Wifi
  - Social Engineering
  - Sending them in the clear
- Software Vulnerabilities
  - Plugins - even the inactive
  - Themes - yes, even the inactive
  - WordPress Core
- Hosting

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Where Are The Weaknesses?

SSL

- Who works from a coffee shop?
- Get a certificate
  - LetsEncrypt - https://letsencrypt.org/
  - From your hosting provider
  - SSLs.com
- Enforce HTTPS in WordPress wp-config.php
  - define('FORCE_SSL_ADMIN', true);
- Use a VPN
- Also avoid shared or public computers

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Where Are The Weaknesses?

Use Secure Passwords!

- Don’t email or text passwords and userid’s - or other unsecure messaging apps
- At least 12 characters long - length is important….
- Different passwords everywhere
  - Get a password manager

Also - Limit WordPress admins, give only necessary permissions for the time needed

Don’t use the userid “admin”

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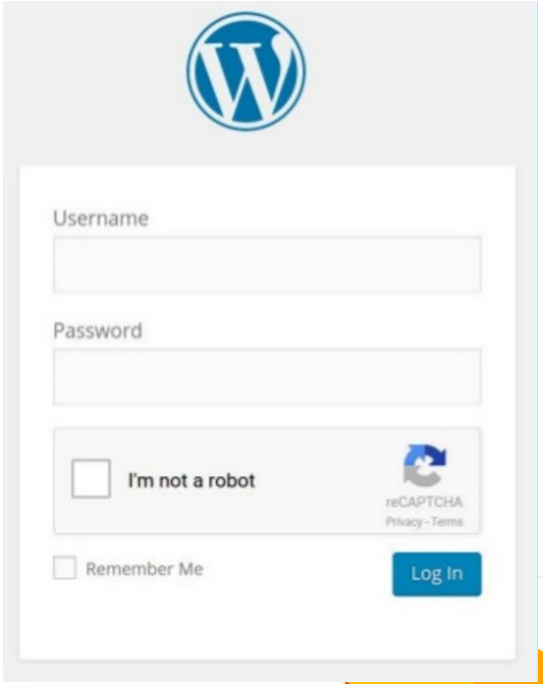
Where Are The Weaknesses?

Use Captcha

WP Login reCAPTCHA

Login No Captcha reCAPTCHA

https://www.google.com/recaptcha



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Where Are The Weaknesses?

Software Vulnerabilities

- UPDATE, UPDATE, UPDATE
- Don’t use pirated software or suspicious “free” themes
- Limit your exposure by reducing plugins
  - Not all plugins are written by security experts….
- Remove all inactive plugins and themes
- define(‘DISALLOW_FILE_EDIT’, true); wp-config.php
- Move /wp-config.php - WordPress will find it
- Don’t use the default database prefix wp_
- Don’t share database among multiple sites

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Where Are The Weaknesses?

Hosting

- Shared hosting has more exposure
  - Cross Contamination - Especially if you are a developer and keep multiple projects in the same shared space with no isolation
- VPS offers additional isolation from other sites but is not necessarily more secure in other ways
- Most major hosting companies provide good security and updated environments because it's ultimately cheaper for them, but....
  - Look up their environment, latest PHP, Linux, etc.
  - Security or status blog, good support
  - Can you use an Letsencrypt SSL cert or cert you provide
  - Do they offer WordPress specific hosting?
  - Consider SSH, not basic ftp, don't share folders on website

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Security Plugins

DO YOU HAVE A BACKUP??

- BackupBuddy
- Store off-site copies, Pull and Push
- Backup as often as your data changes and you can afford to reconstruct it
- Automatic - scheduled

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Security Plugins

Monitoring - Scanning

- WPScan
- Google Search Console
- Jetpack Protect
- Sucuri - scanner plugin (free)

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Security Plugins

Defense

- VaultPress - Subscription Service
- Wordfence - now includes Two-Factor
- iThemes Security
- All in One WP Security
- Google Authenticator
- Keyy Two-Factor Authentication
- BulletProof Security - Firewall
- WP Cerber Security
- Malcare

DON’T install all of them!

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Security Plugins

Remediation - Cleanup

- Wipe the environment CLEAN including new database
- Restore your backup
- Don’t have a backup… review every file
  - Replace everything you can with new copies
- Change all of your passwords and salts again
- Eli - Anti-Malware Security and Brute-Force Firewall
- Malcare
- Sucuri - professional services
- Check Cron Jobs

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