

The Future Is Now

PHP 7

Matt Jaworski - Founder & CTO @ [PeepSo.com](https://PeepSo.com)



# THANKS FOR COMING

A few words about me

- Matt Jaworski - Founder & CTO of [PeepSo.com](https://PeepSo.com)
- 33 years old, originally from Poland
- Software engineer - 20+ years as a hobby, 15+ years as my job
- Today's talk:
  - Benefits of upgrading to PHP 7
  - Disadvantages and security risks of staying behind

# TALK NERDY TO ME

Why PHP 7 is cool (if you are a programmer)

- Most features mentioned here exist since PHP 7.1 or 7.2
- More details are linked in the last slide of this presentation: [PeepSo.com/PHP7](http://PeepSo.com/PHP7)
- Cleaner code thanks to new operators & syntax sugar
  - NEW: `$var = $_GET['var'] ?? FALSE;`
  - OLD: `$var = (isset($_GET['mykey']) && NULL!==$_GET['var'])) ? $_GET['var'] : FALSE;`
- Less prone to crashing thanks to improved error handling and more Exceptions
- Type declarations for function arguments / return values, including void functions
- Class constant visibility, abstract method overrides
- Safer random numbers and cryptography with user-land CSPRNG, Sodium and Argon2
- HTTP/2 server push support

“I’m still not excited”

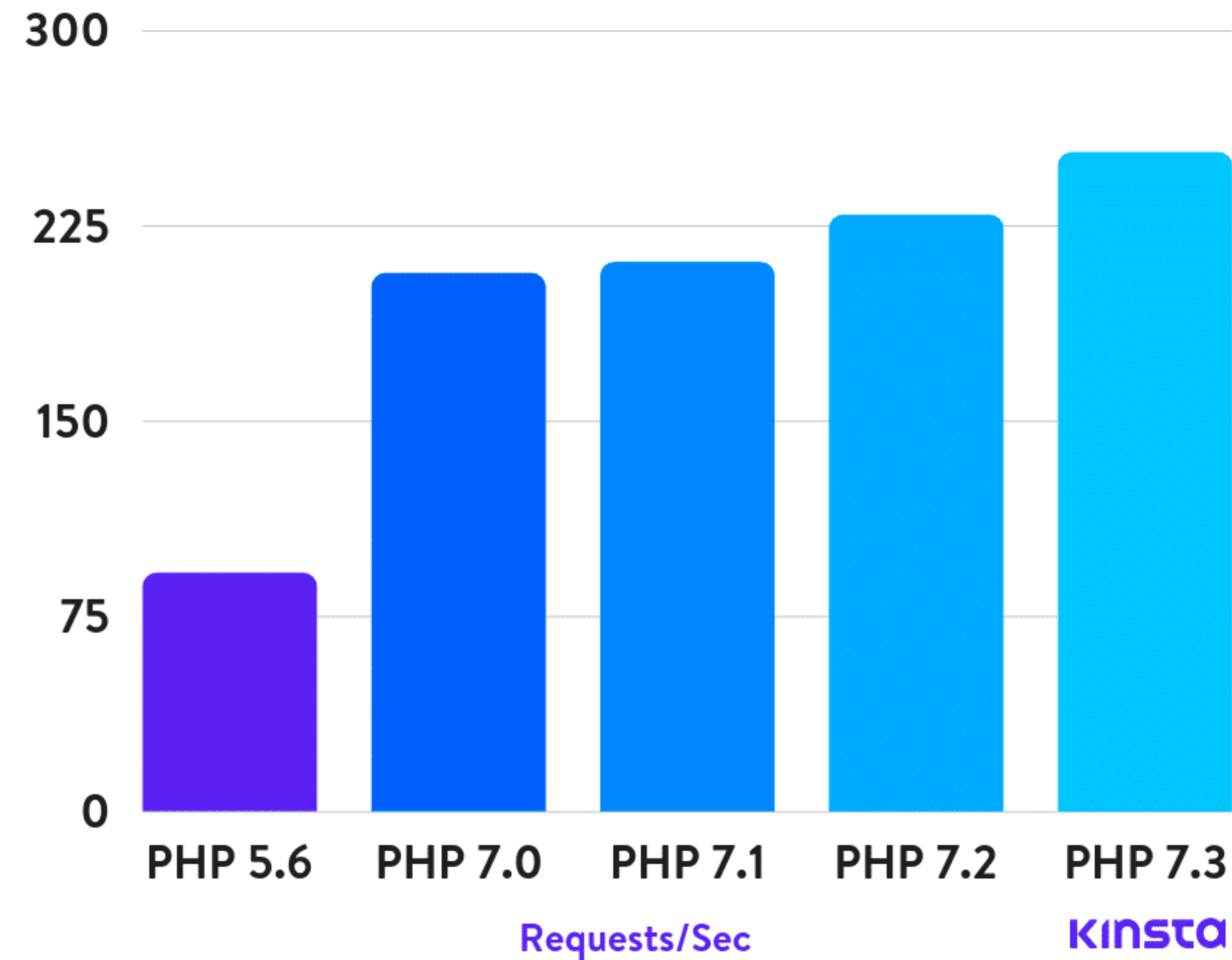
PHP 7 IS FAST





# WORDPRESS 5 BENCHMARK

According to [kinsta.com](https://kinsta.com)



“I get it - PHP 7 is new, shiny and fast.  
But PHP 5 works fine for me, so why should I bother?”



# PHP 5 IS ANCIENT

Older than the iPhone!

- Originally released in 2004
- Smartphones with keyboards were still cool
- It was quite revolutionary back then
- The first PHP version to be Object Oriented (OO)
- Actively developed until the end of 2016





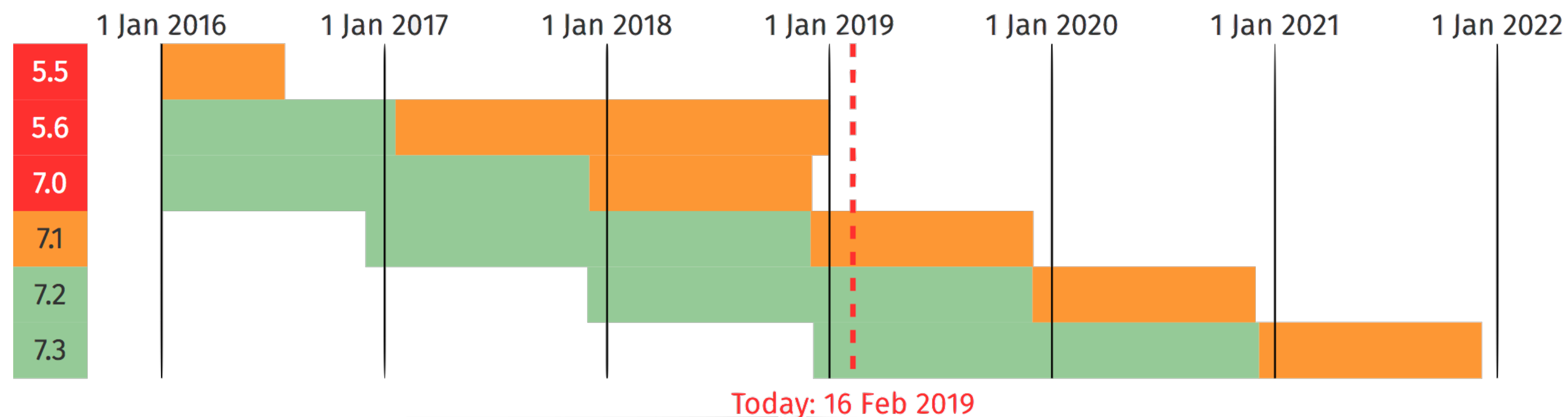
# PHP 5 IS ANCIENT

Why did it live this long?

- PHP 5 was never expected to live this long
  - Major PHP versions used to be released every 2 years (on average)
- PHP 6 development started in 2005, aimed at full UTF-16 support
  - Turned out to be a dead end and was scraped
  - Most of the code was back-ported to PHP 5
- PHP 7 was born from the phpng branch which led to Zend Engine 3
- Support for PHP 5 was extended to buy time to develop and adopt PHP 7
  - There were multiple minor releases up to PHP 5.6
  - 7.0 was released after over a decade without a major PHP release
- The Security Fixes period for PHP 5 has ended on December 31st 2018

# THE PHP LIFE CYCLE

Understanding the End Of Life event



Active support	A release that is being actively supported.
Security fixes only	A release that is supported for critical security issues only.
End of life	A release that is no longer supported. May be exposed to unpatched security vulnerabilities.

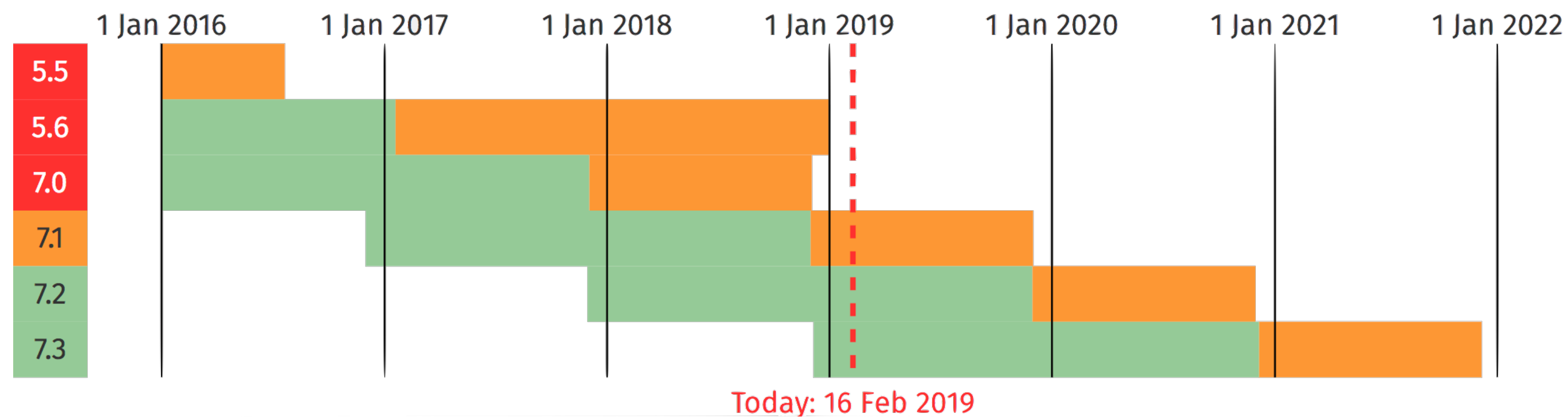
# PHP 5 IS A SECURITY RISK

And it just gets worse every day

- Scheduled End Of Life reached on December 31st 2018
  - There will be no more PHP 5 releases
  - Not. Even. Critical. Security. Patches.
- PHP is Open Source - bad guys can and will find holes that will never be patched
- There actually are websites where all exploits are listed and some of them don't require an expert
- Every day you stay on PHP 5 brings you closer to being hacked

# HOW ABOUT PHP 7.0?

And why it's also a very bad choice

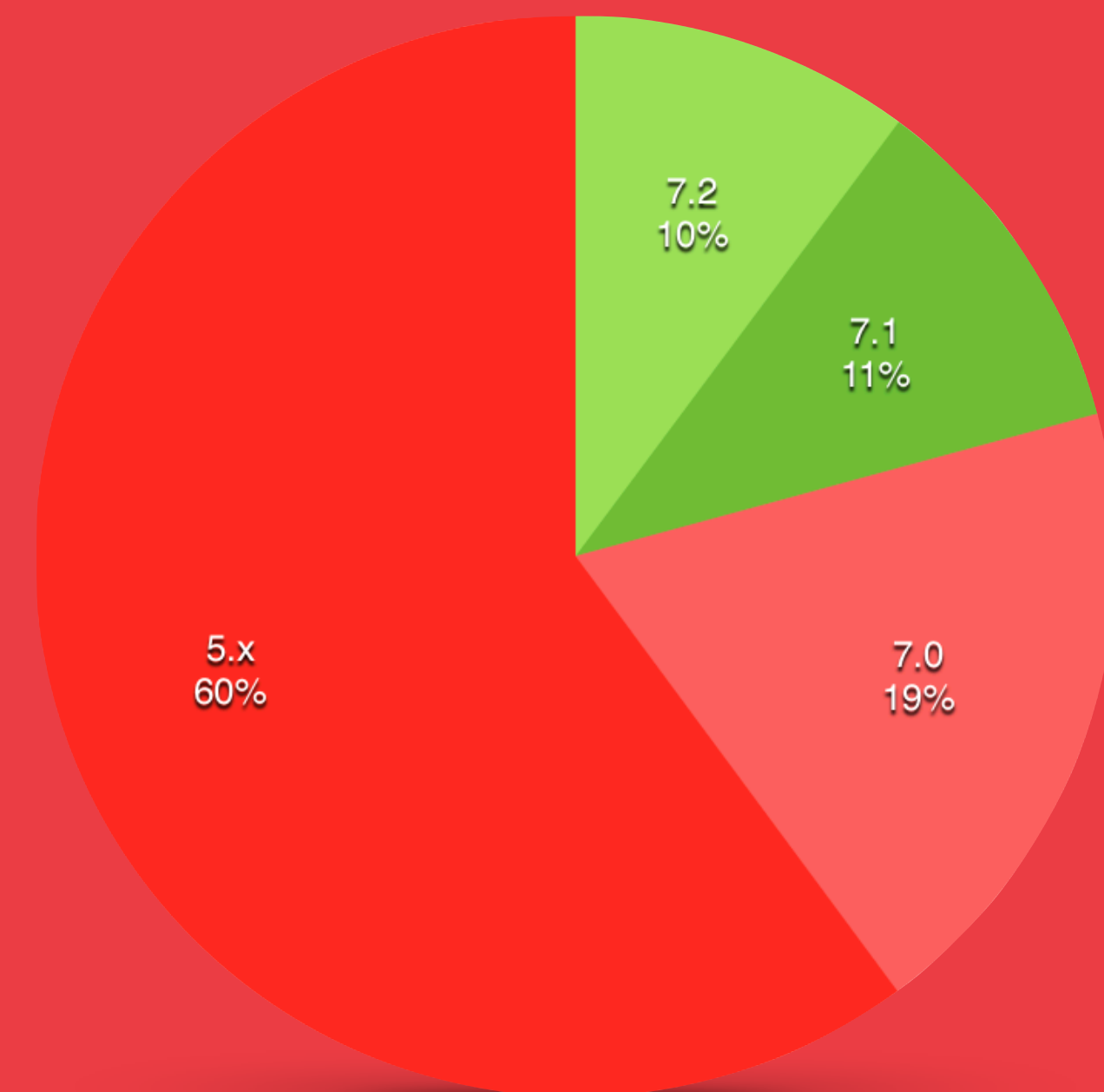


- PHP 7.0 has actually reached End Of Life as well
  - It now poses the same security risk as PHP 5 (but with twice the performance)
- PHP 7.1 is already in “Security Fixes” mode already
- **PHP 7.2 and PHP 7.3 are the only actively developed versions**

# WHY SO SERIOUS?

Over 75% of WordPress sites are in danger

- Many developers don't test their code on new PHP
- Plugins and themes tend to crash / malfunction
- This keeps users from upgrading to latest PHP
- The entire WordPress world is staying behind the curve
- As 5.x and 7.0 reached EOL, everyone is in danger
- **Our entire industry might get labeled as untrustworthy**
- We have a responsibility to educate and warn the users
- New PHP does not suddenly happen overnight





# HOWTO UPGRADE?

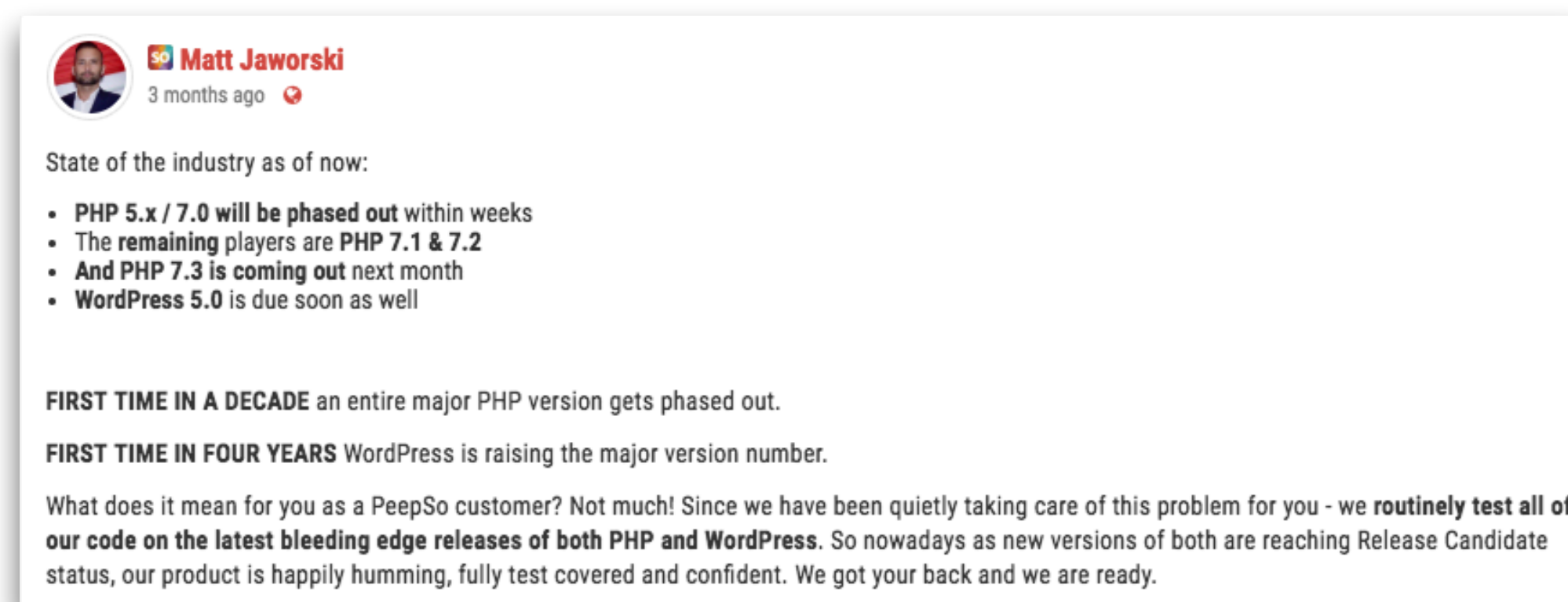
Where do we go from here?

- Set up a staging copy of your website in a controlled environment
  - Use PHP 7.2 or newer
  - Test everything thoroughly
  - Both as guest and member
  - Special attention to registration, login, checkout
- Technology moves fast - make sure to work with companies who keep up
  - Any plugins or themes breaking down? It might be time to walk away.
  - Your host does not support PHP 7.2+? RUN FOR YOUR LIFE!
  - You deserve better than them
- Don't let bad code, lazy programmers and abandonware shape our future


# THIS IS HOW WE DO IT

## The PeepSo method

- All code is peer reviewed and then moves to automated testing
- Everything covered with Selenium WebDriver automated tests
- 21 PeepSo plugins (7 of them integrate with third party plugins) & the PeepSo Theme
- Approx. 1500 Test Cases & 25000 Asserts running continuously
- Test suites routinely run on upcoming releases of WordPress and PHP (Release Candidates)



A screenshot of a tweet from Matt Jaworski (@mattjaworski) posted 3 months ago. The tweet discusses the state of the industry regarding PHP and WordPress versions. It lists that PHP 5.x / 7.0 will be phased out, the remaining players are PHP 7.1 & 7.2, and PHP 7.3 is coming out next month, along with WordPress 5.0. It highlights that this is the first time in a decade an entire major PHP version gets phased out, and the first time in four years WordPress is raising the major version number. The tweet concludes by stating that PeepSo customers are not affected because the company routinely tests all code on the latest bleeding edge releases of both PHP and WordPress.

 **Matt Jaworski**  
3 months ago

State of the industry as of now:

- **PHP 5.x / 7.0 will be phased out** within weeks
- The **remaining** players are **PHP 7.1 & 7.2**
- **And PHP 7.3 is coming out** next month
- **WordPress 5.0** is due soon as well

**FIRST TIME IN A DECADE** an entire major PHP version gets phased out.

**FIRST TIME IN FOUR YEARS** WordPress is raising the major version number.

What does it mean for you as a PeepSo customer? Not much! Since we have been quietly taking care of this problem for you - we **routinely test all of our code on the latest bleeding edge releases of both PHP and WordPress**. So nowadays as new versions of both are reaching Release Candidate status, our product is happily humming, fully test covered and confident. We got your back and we are ready.

# SUMMARY

And questions

- **PHP 5.x and PHP 7.0 have reached scheduled End Of Life - no more security fixes**
- PHP 7.x is a major upgrade in terms of speed, clean code, stability and cryptography
- Upgrade to at least PHP 7.2 to avoid building up technical debt
- Take responsibility for shaping the future of WordPress by cutting off dangerous legacy
- Walk away from developers and service providers who don't keep up

[PeepSo.com/PHP7](https://PeepSo.com/PHP7)

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# QUESTIONS?

Get in touch  
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[@jaworskimatt](#)

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# TERIMA KASIH!

Thank you for your attention

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# SOURCES

- Kinsta.com - [The Definitive PHP 5.6, 7.0, 7.1, 7.2 & 7.3 Benchmarks](#)
- PHP.net - [supported versions](#)
- Wikipedia.org - [PHP history](#)
- New features in all PHP 7 versions to date:  
<http://php.net/manual/en/migration70.new-features.php>  
<http://php.net/manual/en/migration71.new-features.php>  
<http://php.net/manual/en/migration72.new-features.php>  
<http://php.net/manual/en/migration73.new-features.php>
- Sodium and Argon2 cryptography solutions:
  - <https://en.wikipedia.org/wiki/Argon2>
  - <http://php.net/manual/en/book.sodium.php>