

FOR BOARDS OF DIRECTORS, C-SUITE & CISOs

PHP2SHELL

VULNERABILITY: WHAT BOARDS NEED TO KNOW AND DO NOW.

A Board briefing on PHP2SHELL. Two critical vulnerabilities in a technology behind most of the web, what they mean for your organization, and the governance actions to take now.

~70%

OF WEBSITES & WEB APPS
USE PHP⁷

ALL

SUPPORTED & UNSUPPORTED
PHP VERSIONS AFFECTED

OFFLINE

US & EU GUIDANCE UNTIL
SYSTEMS CAN BE PATCHED^{1,2}

KEY TAKEAWAYS



THE RISK

Two critical vulnerabilities in PHP, collectively referred to as "PHP2SHELL", affect **all versions of PHP** and expose internet-facing websites and applications to compromise. US and European government cybersecurity bodies recommend **taking affected systems offline until they can be patched**^{1,2}.



YOU ARE LIKELY EXPOSED

PHP is a popular software package used in approximately **70% of all websites and web applications**⁷, meaning you may not have heard of PHP but there's a really good chance your organization is using it.



CAUTION: FAKE SCANNERS

Quadrum Advisors has received reports that several unknown free tools marketed to scan for these vulnerabilities are **malware infused** and are being used to infect organizations.

THE BIGGER PICTURE

Not all doom and gloom. AI is accelerating how fast serious flaws are found, but defenders have the same AI advantage. Organizations that act on the fundamentals now will be better positioned and more resilient to weather these storms.

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WHY THIS MATTERS TO YOUR BOARD AND ORGANIZATION

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Internet-facing exposure. Public websites, portals and applications built on PHP are potentially affected, and are the assets attackers target first.
- 
Revenue, brand and availability. Following official guidance may result in taking customer-facing sites offline; several organizations and governments already have. Downtime is a business decision, not just a technical one.
- 
Third-party and supply-chain exposure. In addition to your corporate PHP footprint, PHP can exist inside vendor products, hosted services and packaged applications. In North America, 43% of breaches already involve a third party⁶.
- 
Opportunistic attackers. Criminals are exploiting the crisis itself, with malware disguised as scanning tools for this particular vulnerability.
- 
Weaponization velocity. These vulnerabilities were uncovered using the OpenAI frontier model, evidence that frontier AI is accelerating the velocity and scale of cybersecurity events.

WHAT IS THE ISSUE AND ITS IMPACT

 THE ISSUE PHP2SHELL represents two vulnerabilities in PHP affecting all supported and unsupported versions. In practical terms, they can allow compromise of affected systems, with potential for widespread exploitation.	 MITIGATION The PHP team has released software updates that resolve this issue, but only for fully supported versions of PHP. Deprecated PHP versions require organizations to upgrade, which can be a significant level-of-effort.
 GOVERNMENT GUIDANCE US and EU government cybersecurity bodies recommend taking affected systems offline until they can be patched^{1,2}.	 REAL-WORLD RESPONSE Several organizations and governments have taken mission-critical websites offline until the issues can be resolved.

WHAT YOU SHOULD DO NEXT

REMEDIATION PRIORITY



- 01 **Contain or patch internet-facing PHP systems first**, as they are the most exposed.
- 02 **Do not run unverified third-party scanners in production.** Treat publicly marketed scanning utilities as potentially malicious and validate any tooling in an isolated environment first.
- 03 **Prioritize remediation efforts by risk:** Internet-facing devices first, then critical business services, then internal systems.
- 04 **Map your full PHP footprint:** You cannot remediate what you don't know about. That includes packaged software, embedded devices and third-party applications.
- 05 **Engage vendors and the supply chain.** Require attestations, patch timelines and mitigation status from critical vendors and suppliers. Their exposure is your exposure.
- 06 **Activate incident response and communications playbooks**, including legal, regulatory and customer/partner notification planning.
- 07 **Isolate and harden backups and recovery plans** to preserve the ability to recover if systems are compromised.
- 08 **Consider temporary service takedowns** where risk cannot be mitigated immediately. You won't be alone, several organizations and governments have already done so to protect their data and their customer's data.
- 09 **For systems that cannot be patched**, such as legacy or operational technology (OT), protect what you can't fix: isolate and segment.

THE SILVER LINING

While PHP2SHELL represents a significant event that organizations need to act on, the fact is the vulnerabilities were uncovered by cybersecurity researchers who worked closely with the affected software organization, PHP, to resolve the issue. It should be seen as a **wake-up call** given the next vulnerability may be uncovered by threat actors with malicious intent who actively exploit the vulnerability before even the software vendor becomes aware of it. **The time to act is now; use it wisely.**

NOT ALL DOOM AND GLOOM: THE DEFENDERS HAVE AI TOO

Frontier AI is dual-use: the same capability that helps attackers find flaws can enable defenders to find and fix them first. As Quadrum Advisors told audiences at several recent cybersecurity conferences⁵:



AI helped surface these flaws. PHP2SHELL was uncovered using a frontier AI model, and the PHP team has responded with mitigation actions.



Defenders get the same boost. AI-assisted detection, triage and automated containment can shrink response from days to minutes.



Misuse is detectable. One major AI provider caught and enforced against 793 unique threat actors misusing its platform, and the first AI-orchestrated espionage campaign (Nov 2025) was detected and disrupted⁵.



AI is industrializing known attacks, not inventing new ones (yet). Fewer than 2.5% of AI-assisted malware is genuinely novel; the median threat actor used AI across 15 known vulnerability exploitation techniques⁵. The fundamentals still hold true.



We can stop shipping the bugs. The same AI tools let software makers find and fix flaws before release.

“

As AI models evolve, it allows threat actors to find bugs quicker, but at same time enables defenders to use AI based countermeasures.

A fair race is the goal.

THE HONEST CAVEAT

Defenders are still behind on automation. Finding bugs is easy, auto-patching is hard. **The advantage goes to organizations that invest now.**

THE SPEED IS NEW. THE TARGETS ARE OLD.

Attackers still walk through the same doors; unpatched edge devices, people who click, and third parties we don't control, but AI enables them to do so at greater velocity⁵.



REAL: ACT ON IT

Autonomous exploit development: AI agents find vulnerabilities and write working exploits. One vendor test confirmed full external compromise from the outside to their crown jewels in under 3 hours.

AI reverse engineering: comparing two software versions produced a working remote exploit in under 90 minutes, without even requiring any source code.

Implication: the traditional 90-day patch window is effectively gone.



HYPE: DON'T OVERREACT

Instant defensive parity: doesn't exist yet. Defenders must invest to catch up on automation.

Complex AI "scaffolds": costly wrappers for limited gains get overtaken by the next AI model release. Prioritize funding elsewhere.

Test every claim on two axes: likely vs. unlikely, and proportionate vs. reactive.

WHAT THE BOARD SHOULD TAKE AWAY FROM THIS EVENT

-  **Translate cyber risk into business decisions:** agree in advance on tolerance for balancing availability with security (e.g. whether to take systems offline)
-  **Pre-authorize rapid decisions:** confirm who is authorized to take systems offline in a crisis without waiting for a board meeting.
-  **Oversee vendor and supply-chain risk:** expect management to report third-party exposure, attestations and patch timelines.
-  **Invest before the crisis:** fund tested incident playbooks, crisis communications and validated tooling.
-  **Plan for recurrence:** frontier AI will accelerate discovery and exploit cycles; demand scenario planning for recurring high-velocity vulnerabilities.

THREE QUESTIONS YOUR BOARD SHOULD ASK MANAGEMENT THIS WEEK

RISK ACCEPTANCE

How has our risk-acceptance calculus shifted to stay competitive, and are we comfortable with where it has landed?

THIRD-PARTY EXPOSURE

Where does our data actually live outside our perimeter, and do we know our true third-party exposure?

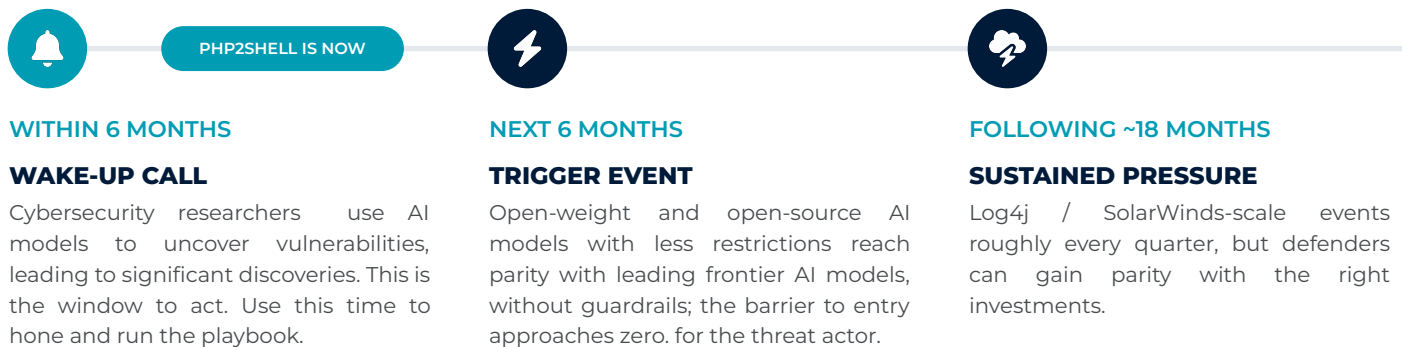
CONTAINMENT SPEED

If an attacker moved at machine speed against us tonight, how long until we contained them; minutes, days, or more?

QUADRUM PREDICTED, AND OUR GUIDANCE STILL APPLIES

In thought-leadership presentations during the course of 2026, including at Filigran THREAD³, the NRI North American Leadership Summit⁴ and the SISAP Connect conference⁵, Quadrum Advisors predicted that evolution of AI technologies would result in a significant cybersecurity event akin to Log4j or SolarWinds to materialize once a quarter, that the first would likely appear in the next 6-12 months; and that recurrence would increase as we get further into 2027. **Unfortunately, our predictions proved to be right. It's no longer a question of if or when, but how often...**

THE FORECAST WE PRESENTED IN THE FIRST HALF OF 2026



OUR RECOMMENDATIONS REMAIN VALID TODAY

01

VULNERABILITY MANAGEMENT & ZERO TRUST



Make vulnerability management your top priority and evaluate automated remediation. Design for the breach, and give every AI agent and non-human identity only the access it needs.

02

MACHINE-SPEED DEFENSE



You cannot win an AI race at human speed. Put AI in the security operations center first, then orchestration, then automated remediation; auto-quarantine on anomalies to contain intruders in minutes, not days.

03

THIRD-PARTY ASSURANCE



Move beyond annual questionnaires to contractually enforceable safeguards and proactive telemetry on critical vendors. Keep optionality and avoid long vendor contract lock-ins during a major technology shift.

04

PROGRAMMATIC CYBERSECURITY



Shift from one-off projects to a continuous, board-sponsored program with recurring metrics, evidence of oversight and clear accountability, such that investment compounds and risk exposure falls.

HOW QUADNUM ADVISORS CAN HELP



Board Cybersecurity Briefings & Reporting

Translating technical risk into governance-ready language.



Investor Security Due Diligence

Rapid assessment for PE firms prior to investing in cyber companies.



Board Advisory Retainer (including Emergencies)

Emergency support and rapid response for Boards during crisis situations.



Cybersecurity Startup & Product Advisory

Help evolve cybersecurity services and products to address emerging on/over-the-horizon threats.



For an immediate executive briefing or emergency advisory support, contact Quadrum Advisors at inquiry@quadrumadvisors.com

ABOUT QUADNUM ADVISORS

Quadrum Advisors is a selective, invite-only cybersecurity advisory focused on Boards of Directors and Senior Executives, founded by long-standing practitioners and Fortune 20 executives with deep experience advising the President of the United States, Boards, and Advisory Committees.

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REFERENCES

CVEs: CVE-2026-109618; CVE-2026-109619 (collectively "PHP2SHELL").

[1] US CERT / CISA: <https://www.cisa.gov/news-events/alerts/2026/10/21/critical-vulnerabilities-php-require-immediate-patching>

[2] EU CERT: <https://cert.europa.eu/publications/security-advisories/2026-018>

[3] Filigran THREAD: <https://filigran.io/thread>

[4] NRI North American Leadership Summit: <https://goto.nri-na.com/2026-Risk-Without-Borders.html>

[5] Quadrum Advisors, SISAP Connect 2026 keynote: "Mythos, Daybreak, and the 2026 Cyber Threat Landscape."

[6] 2026 Verizon Data Breach Investigations Report: <https://verizon.com/dbir>

[7] W3Techs Stats on PHP Usage: <https://w3techs.com/technologies/details/pl-php>