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Machine-speed agentic cybersecurity

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CSAI

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In this issue

The lead is Microsoft's report that Chinese and North Korean state actors now run the ARTEX agentic framework, including password-spray campaigns that reached privileged access in under three hours and an agent that went from a GitHub secret search to Azure Key Vault data in five minutes. Also here: Drupal's second exploited installer flaw a week after the fix for the AI-found original turned out incomplete, an unpatched Cacti remote-code-execution chain published without coordination over the US holiday, a CREST survey finding that no regulated pentest provider it asked lets AI test autonomously, and the HKMA's proposed registry for bank AI agents.

Chinese and North Korean state actors now run the ARTEX agentic framework, with one Storm-0940 campaign reaching privileged access in under three hours

Category: machine_speed **Significance:** major **Confidence:** SELF-REPORTED (PROVIDER METRIC) for the "more than 151,000 failed sign-ins, peaking at 2,900 failures per minute" and the under-three-hours interval to privileged access; VERBATIM (PROVIDER) for "ARTEX does not introduce new attack techniques" and for actors that "can and do vary network indicators like source IP address or user agent string"; LINK ONLY — VERIFY AT SOURCE for the five-minute GitHub-secret-to-Key-Vault sequence as reported by Help Net Security and for Microsoft's hunting thresholds; CHARACTERIZATION (CSA) that state adoption moves ARTEX from a criminal and opportunistic tool to a planning assumption for every enterprise **Vendor interest:** Microsoft sells the endpoint, identity and SIEM detection products its post recommends, so the framing that behavioural detection is the reliable signal is commercially favourable to it. **Source:** Microsoft Security Blog — What defenders need to know about ARTEX, the agentic AI framework threat actors abuse

What changed. On 25 November 2026 Microsoft Threat Intelligence named six state-linked actors it has seen using ARTEX: China-based Storm-0940, Crystal Typhoon and Salt Typhoon, North Korea-linked Onyx Sleet and Pearl Sleet, and Storm-3358. ARTEX is the open-source LLM-driven pentest framework whose original repository was taken down in October, and whose forks and a commercial "ARTEX Pro" edition are still available. Storm-0940 sprayed passwords at Microsoft 365 tenants at up to 2,900 failures per minute, and in several intrusions went from first targeting to privileged access in under three hours. In one case an application gave itself the Global Administrator role. Help Net Security's reading of the report adds a case where an agent went from searching GitHub for client secrets to taking data from

Azure Key Vault in five minutes. Microsoft's own summary is that the framework adds speed, not new techniques. The 13 November FBI FLASH reported the same under-three-hours figure without naming state actors.

Why it reaches you. The exposure path is the cloud identity plane: password-sprayable Entra ID accounts, application registrations that can grant themselves directory roles, and client secrets committed to code repositories that lead straight to secrets vaults. Microsoft says the actors rotate source IPs and user-agent strings. A known ARTEX user agent (`artex-enrich/*`, `norma/*`) is worth alerting on, but blocking it will not hold. State actors adopting the framework means ARTEX-paced intrusions are no longer limited to opportunistic criminals going after easy targets.

What to do. Identity security lead: validate. Confirm that an alert fires, and reaches containment rather than a queue, when an application or service principal adds itself to a privileged directory role. Confirm that password-spray detection keys on the targeted tenant and accounts rather than on the source IP. Then rotate any client secret found in a code repository, rather than only deleting the commit.

CSA coverage. Fingerprinting Agentic Offensive Frameworks: Intent IDs, Cadence, and Self-Labels

Drupal's fix for its AI-found installer flaw missed some installation states, and the follow-on flaw was exploited before the second fix a week later

Category: vuln_storm **Significance:** notable **Confidence:** VERBATIM (PROVIDER) for "This is being exploited in the wild" in SA-CORE-2026-019, for "If you have already secured the installer, you are not vulnerable", and for the requirement to run `update.php` so "an update hook" can fix existing sites; VERBATIM (PROVIDER) for SA-CORE-2026-017's credit to Anthropic's OSS Scanner and exploitation "as early as 2026-11-19 19:00 UTC"; NO PROVIDER CLAIM on how the second flaw was found or when its exploitation began; CHARACTERIZATION (CSA) that this is a fix-completeness failure, not a new discovery **Source:** Drupal.org — Drupal core - Highly critical - Access bypass - SA-CORE-2026-019

What changed. On 25 November 2026 Drupal published SA-CORE-2026-019 (CVE-2026-136716, rated 21/25) and said it is being exploited in the wild. It covers "unusual or incomplete installation states" that the 18 November fix for Fail2Install (CVE-2026-132165) did not handle. Fail2Install was found by Anthropic's OSS Scanner and exploited about a day after that fix. The fixed releases are 11.4.14, 11.3.23 and 10.6.23. Sites must also run `update.php`, because the fix for sites already in a bad state is an update hook, not the code change alone. Drupal 11.2.x and earlier get no fix. Security Affairs cites Drupal statistics from 15 November showing thousands of sites still on Drupal 8.x and tens of thousands on 9.x.

Why it reaches you. This is the second half of the AI-discovery cycle: a flaw found at machine speed, patched within the normal process, exploited within a day, and then found to need a second patch. A team that closed its ticket after the 18 November release is exposed again, and a team that upgraded but did not run `update.php` may still have a vulnerable production site. The component class is any CMS-hosted web estate where the installer endpoint was never locked down, including marketing microsites and end-of-life branches outside central patching.

What to do. Web platform owner: validate. Confirm that `install.php` is unreachable from the internet on every Drupal site, including end-of-life branches. Upgrade to the 25 November releases and run `update.php`, then check user 1's email address and reset its password where it cannot be accounted for. Treat any AI-found flaw's first fix as provisional, and keep the incident ticket open until a second advisory window has passed.

CSA coverage. Fail2Install and Its Sequel: AI-Found Drupal Installer Takeover

A Cacti remote-code-execution chain was published with a working exploit over the US holiday, with no CVE, no advisory and no patch, and honeypot probes followed within a day

Category: vuln_storm **Significance:** notable **Confidence:** VERBATIM (PROVIDER) for Previdian's "22 SQL injection probes from a single source IP" against its honeypots on 27 November with no confirmed command execution; LINK ONLY – VERIFY AT SOURCE for the researcher's statement, as reported by BleepingComputer, that Cacti was not told first, and for 1.2.31 as the only version confirmed vulnerable; NO PROVIDER CLAIM from the Cacti project, whose advisories page had no entry as of 28 November; CHARACTERIZATION (CSA) of this as disclosure-process strain rather than a capacity problem **Source:** BleepingComputer – Unpatched Cacti zero-day with public PoC gives remote code execution

What changed. On 26 November 2026 a researcher published proof-of-concept code for "4HTTP2SHELL" (first named 4HTTP2ROOT). It is a four-request chain against Cacti 1.2.31: a stored, second-order SQL injection through `preview_graphs_per_page` that leads to command execution via `graph_realtime.php`. It needs the guest account to be enabled, which is off by default, and no authentication. Code runs as the web or poller account. The root shell in the demonstration came only from a lab install running as root. As of 28 November there is no CVE, CVSS score, vendor advisory or patch, and severity labels from trackers range from a placeholder 0.0 to critical. Previdian saw SQL injection probes against its honeypots on 27 November. No source has reported successful exploitation in the wild.

Why it reaches you. Cacti is network-monitoring infrastructure. It holds SNMP credentials and device inventory, and it usually has routes into management networks, so a compromised poller is a pivot point rather than an isolated web app. The last critical Cacti flaw, CVE-2022-46169, was exploited from January 2023, and Censys found 26 patched hosts out of about 6,400 exposed. With agentic frameworks that pick up public exploits, an unpatched PoC with a narrow precondition still gives defenders a short window.

What to do. Network operations owner: escalate. Disable the guest account on every Cacti instance today, confirm no Cacti web interface is reachable from the internet, and check that the web service does not run as root. Alert on requests to `graph_view.php?action=preview` from unauthenticated sessions until a vendor fix ships.

CSA coverage. 4HTTP2SHELL: Unpatched Cacti Zero-Day Turns Monitoring Servers into Pivot Points

None of the 11 regulated penetration-testing providers CREST asked lets AI test autonomously, and 92% require client approval before sending client data to cloud AI

Category: security_operating_model **Significance:** notable **Confidence:** SELF-REPORTED (PROVIDER METRIC) for the survey figures (26 provider respondents and two roundtables, weighted to financial services): 81% using AI beyond experimentation, 0 of 11 regulated providers allowing autonomous AI execution against one commercial provider that does, 92% requiring explicit client approval for client data sent to external AI, and 62% requiring it for autonomous testing actions; VERBATIM (PROVIDER) for "TLPT, particularly in production environments, has always been high risk and in need of the strongest assurance"; LINK ONLY – VERIFY AT SOURCE for the full report, which the article does not link; CHARACTERIZATION (CSA) that this sets a reference point for what to write into testing contracts **Vendor interest:** CREST runs paid accreditation schemes for penetration-testing providers, so a finding that AI-enabled testing needs stronger assurance fits its business. **Source:** Help Net Security – AI raises new questions about what penetration testing proves

What changed. On 27 November 2026 CREST published *AI and the Future of Threat-Led Penetration Testing: Capability, Control and Credible Assurance*, a survey of 26 testing providers. AI use is common: 81% use it beyond experimentation, and 65% expect it to support at least 40% of threat-led test tasks within a year. Autonomy is not: none of the 11 regulated providers asked about execution authority let AI act autonomously against client systems. Providers ranked scope and operational control (68%) and client data confidentiality (68%) among their top three delivery risks. In total, 92% say validating AI output is an essential skill, and 85% expect procurement requirements about AI to increase.

Why it reaches you. Threat-led and red-team tests run against production. They are also the evidence a board, regulator or DORA/TIBER-style programme relies on. If a provider's AI took actions in scope, the enterprise needs to know who authorised each action and where its data went, and most current statements of work say nothing on either. The survey shows the regulated end of the market holding AI to an assistive role. That gives buyers a baseline to write into contracts, and a reason to ask a provider that claims autonomous testing how its scope control works.

What to do. Security assurance or testing programme owner: validate. Before the next engagement, add three clauses to the statement of work: disclosure of every AI tool used and where client data is processed, explicit client approval for any autonomous action against production, and a record of which findings a human validated. Ask current providers to answer the same three in writing.

CSA coverage. New — no prior CSA coverage.

The HKMA proposes that banks record every AI agent before production and notify it of material agents with a tools catalogue that includes MCP servers

Category: security_operating_model **Significance:** context **Confidence:** LINK ONLY — VERIFY AT SOURCE for the record fields, the two-step materiality test, the Exhibit 3 notification contents, the proposed agentic incident types and the 1 February 2027 response deadline, which are taken from CSA's reading of the discussion paper; VERBATIM (PROVIDER) for the paper's statement that it "creates no new obligations"; CHARACTERIZATION (CSA) that the field list is usable as an inventory specification outside Hong Kong **Source:** Hong Kong Monetary Authority — Discussion Paper on Agentic A.I. Governance in the Banking Sector

What changed. On 2 November 2026 the HKMA published a discussion paper with responses due by 1 February 2027. Its preliminary view is that banks record every agentic deployment before production. The record would cover owners, capabilities and access, data leaving the institution, shared dependencies, the stop mechanism, fallback and log locations, and credentials at retirement. For agents judged material, banks would notify the HKMA after deployment with an architecture and dependency map, a model registry, and a tools catalogue of the "MCP servers, API endpoints, or data store" the agent may call. Materiality turns on the agent's reach, and on whether a genuine per-action human approval stands in its way. An irreversible action stays material even with an approval gate. The stop mechanism would be retested at least annually and after every material change. Proposed reportable incidents include an agent acting beyond its authority, a stop mechanism that fails, and a monitoring deployment that fails silently.

Why it reaches you. This is a discussion paper, not a rule. It is still the most specific regulator statement yet of what an agent inventory has to contain, and it makes the MCP server and tool layer a reportable dependency rather than an implementation detail. For banks with Hong Kong operations it is a likely outline of the future requirement. For everyone else it is a ready-made list for testing whether an existing agent inventory could answer a supervisor's questions.

What to do. AI governance lead: monitor. Compare the current agent inventory with the HKMA's Section 7.3 record fields, and note which fields cannot be filled today, especially tool and MCP dependencies, stop-mechanism test dates and credentials at retirement. Banks with Hong Kong operations should decide by January whether to respond to the consultation.

CSA coverage. Registering the Agent Fleet: HKMA's Proposed Material AI Agent Registry

Watchlist

- **OpenAI reward-hacking postmortem — downstream response** — No change. No other frontier lab has disclosed a comparable escape from evaluation into production, and no regulatory or contractual outcome has been reported. *(opened 2026-08-27)*
- **VM/hypervisor containment hardening for cyber-capable agents** — The patch picture for the KVM nested-virtualization escape on AMD hosts (CVE-2026-99312) is still uneven. Debian trixie is fixed (DSA-6652-1) and bookworm is not. As of 25 November, Ubuntu lists its 22.04, 24.04, 26.04 and 26.10 kernels as vulnerable, including the aws, azure and gcp variants. Red Hat had deferred the fix for RHEL 9 and 10 as of 20 November. DigitalOcean is live-patching its fleet. Agent sandboxes and CI runners on nested AMD virtualization remain exposed wherever the host kernel is not under the operator's control. No new move to hardened microVMs was reported. *(opened 2026-08-27)*
- **Claude Code Auto Mode prompt-injection ASR discrepancy** — No change. *(opened 2026-08-27)*
- **AI defensive-triage guardrail evasion** — No change. Microsoft's ARTEX report (item 1) describes no use of model refusals against defenders' triage tools. *(opened 2026-08-31)*
- **AI account session hijacking at scale** — No change. *(opened 2026-08-31)*

Opened this issue

- **Cacti 4HTTP2SHELL — vendor fix and exploitation** — `vuln_storm`. Watching for a Cacti advisory, CVE and fixed release, the interval from the 26 November public PoC to each

of those, confirmation of which versions before 1.2.31 are affected, the first confirmed in-the-wild command execution, and a CISA KEV listing.