

# Knowledge Alert

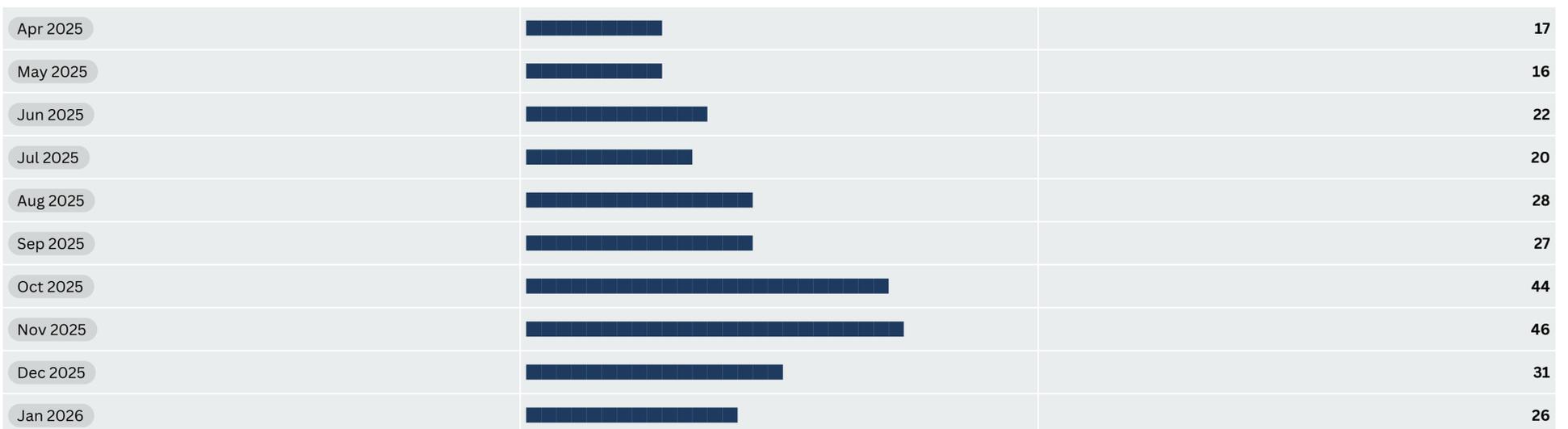


## CERT-In VULNERABILITY INTELLIGENCE BRIEF

10-Month Analysis: April 2025 - January 2026 | With Vulnerability Type Analysis & Remediation Guide



### 10-MONTH VULNERABILITY TREND



Peak: Nov 2025 (46) | 171% surge from Apr to Nov | Stabilizing in Jan 2026

### VENDOR RISK MATRIX

Vendor	Total	Critical	Trend	Priority	SLA
Cisco	38	6	↑	URGENT	48h
Microsoft	28	8	↑	URGENT	48h
Google (Chrome/Android)	32	5	→	URGENT	48h
Fortinet	14	5	↑	URGENT	48h
Mozilla	14	0	→	PRIORITY	7d
GitLab	15	1	→	PRIORITY	7d

Vendor	Total	Critical	Trend	Priority	SLA
HPE/Aruba	12	0	↑	PRIORITY	7d
Oracle	12	4	→	URGENT	48h
Apache	10	1	→	PRIORITY	7d
VMware	8	0	↓	ROUTINE	30d

## Vulnerability Type-Wise Analysis

Comprehensive breakdown of 281 vulnerabilities by attack type, affected products, and business impact

Vulnerability Type	Count	Share	Trend	Key Affected Products	Business Impact
Remote Code Execution (RCE) <b>CRITICAL</b>	58	21%	↑	Microsoft Office/Windows, Google Chrome, Cisco IOS, Fortinet, Oracle, n8n	Complete system takeover, data theft, ransomware deployment, lateral movement
Multiple Vulnerabilities (Bundled) <b>HIGH</b>	98	35%	↑	All major vendors - typically monthly/quarterly security updates	Varies by component - cumulative risk is significant
Privilege Escalation <b>HIGH</b>	28	10%	↑	Windows Kernel, Cisco ISE, Grafana, SolarWinds, Splunk, Linux	Admin/root access, security control bypass, persistent access
Authentication Bypass <b>CRITICAL</b>	22	8%	↑↑	Linksys, ASUS routers, CrushFTP, WordPress plugins, Cisco TACACS+	Unauthorized access, account takeover, identity theft, data breach
Denial of Service (DoS) <b>HIGH</b>	24	9%	→	Cisco, F5 BIG-IP, Palo Alto, Apache Tomcat, ISC Bind, Vercel Next.js	Service disruption, availability loss, business continuity impact
Cross-Site Scripting (XSS) <b>MEDIUM</b>	18	6%	→	Cisco products, Grafana, Zimbra, Drupal, WordPress, Junos Space	Session hijacking, credential theft, defacement, phishing
Information Disclosure <b>MEDIUM</b>	12	4%	→	Cisco, Oracle E-Business, MongoDB, Desktop Window Manager, Linux	Sensitive data exposure, reconnaissance for further attacks
SQL/Command Injection <b>CRITICAL</b>	10	4%	↑	FortiWeb, Cisco REST API, Fortra GoAnywhere MFT, Kibana	Database compromise, command execution, data manipulation
Security Feature Bypass <b>HIGH</b>	8	3%	↑	Windows Secure Boot, Cisco Secure Boot, WhatsApp, Chrome	Security control circumvention, protection mechanism failure
Path Traversal / File Access <b>HIGH</b>	5	2%	→	Fortinet FortiWeb, WordPress plugins, various web applications	Arbitrary file read/write, configuration exposure, code execution
Buffer Overflow / Memory Corruption <b>CRITICAL</b>	6	2%	→	Net-SNMP, Dahua products, Apple products, Chrome V8	Code execution, system crash, memory disclosure
XML External Entity (XXE) <b>HIGH</b>	4	1%	→	SysAid On-Prem, Apache Tika, various XML parsers	Server-side request forgery, file disclosure, DoS
Cross-Site Request Forgery (CSRF) <b>MEDIUM</b>	4	1%	↓	Drupal modules, various web applications	Unauthorized actions on behalf of users

## VULNERABILITY TYPE: ATTACK VECTORS & MITIGATIONS

Vulnerability Type	Attack Vector & Exploitability	Recommended Mitigations
<b>Remote Code Execution</b>	Network-based, often no auth required Exploitability: HIGH - Active exploits exist	Priority patching within 48hrs; Network segmentation; IDS/IPS signatures; Disable unnecessary services
<b>Multiple Vulnerabilities</b>	Various attack vectors combined Exploitability: MEDIUM - Assess individual CVEs	Regular patch cycles; Vulnerability scanning; Risk-based prioritization; Change management
<b>Privilege Escalation</b>	Local or authenticated access required Exploitability: MEDIUM - Often chained	Principle of least privilege; PAM solutions; Monitor admin activities; Regular access reviews
<b>Authentication Bypass</b>	Network-based, no credentials needed Exploitability: HIGH - Trivial to exploit	Enable MFA everywhere; Update firmware immediately; Network access controls; Zero trust architecture
<b>Denial of Service</b>	Network-based, unauthenticated Exploitability: HIGH - Easy to execute	DDoS protection; Rate limiting; Redundancy/failover; Traffic analysis and filtering
<b>Cross-Site Scripting</b>	Requires user interaction Exploitability: MEDIUM - Social engineering	Input validation; Content Security Policy; HTTPOnly cookies; Security awareness training
<b>SQL/Command Injection</b>	Network-based via malicious input Exploitability: HIGH - Well-known techniques	Parameterized queries; Input validation; WAF deployment; Code review and SAST
<b>Security Feature Bypass</b>	Varies by vulnerability Exploitability: MEDIUM - Specific conditions	Defense in depth; Multiple security layers; Configuration hardening; Regular audits

## KEY VULNERABILITIES: IMPACT & REMEDIATION GUIDE

Category	Key Vulnerabilities	Risk Impact	Remediation Actions
<b>Microsoft Windows &amp; Office</b> (28 vulns)	RCE in LSASS, Word, Excel, Windows Graphics; Privilege escalation	Complete system compromise, ransomware	January 2026 Patch Tuesday; Enable Credential Guard
<b>Google Chrome &amp; Android</b> (32 vulns)	RCE, use-after-free, heap buffer overflow in V8 engine	Browser compromise, mobile takeover	Enable auto-update; MDM patches; Block old browsers
<b>Cisco Network Equipment</b> (38 vulns)	Command injection, TACACS+ auth bypass, SNMP RCE	Network infrastructure compromise	Update IOS/IOS XE; Restrict SNMP; Segment management
<b>Fortinet Security Products</b> (14 vulns)	RCE in FortiSIEM, SQL injection in FortiWeb, path traversal	Perimeter breach, data exfiltration	Priority patching; Review firewall rules; MFA for admin
<b>Oracle &amp; SAP Enterprise</b> (12 vulns)	Critical patches for Oracle DB, E-Business Suite, Identity Manager	Business app compromise, financial exposure	Schedule maintenance windows; Test before deploy
<b>Authentication Systems</b> (22 vulns)	Auth bypass in routers, apps, plugins, enterprise systems	Unauthorized access, identity theft	Enable MFA everywhere; Update firmware; Audit auth

## KEY TRENDS & STRATEGIC INSIGHTS

1. RCE Dominance (21%): Remote Code Execution remains top threat - prioritize network segmentation and patch management.
2. Auth Bypass Surge (↑↑): 22 authentication bypass vulnerabilities - MFA implementation now critical across all systems.
3. Perimeter Under Attack: 52+ vulnerabilities in Cisco/Fortinet/HPE - network boundary security needs immediate attention.
4. Injection Attacks Persistent: SQL/Command injection still prevalent - input validation and WAF deployment essential.
5. Browser Security Fatigue: 32 Chrome/Edge vulnerabilities - automate browser updates, consider browser isolation.

## ACTION PRIORITY MATRIX

Timeline	Target Systems	Actions
0-48 HRS	Microsoft, Fortinet, Cisco, Oracle - all RCE vulnerabilities	Emergency patching; Network isolation; Enable monitoring
1-7 DAYS	Browsers, Android, HPE/Aruba, Auth bypass vulns	Verify auto-updates; MDM patches; Enable MFA; Firmware updates
7-30 DAYS	VMware, GitLab, SAP, Apache, XSS/CSRF vulns	Scheduled maintenance; Staging tests; WAF rules; CSP headers

## JHS CYBERSECURITY SERVICES (CERT-IN EMPANELLED)

<b>VAPT Services</b> Network, Application, Cloud, API testing	<b>Compliance Audits</b> RBI, SEBI, IRDAI, DPDP Act, ISO 27001
<b>Security Assessment</b> Infrastructure review, patch management audit	<b>Incident Response</b> Forensics, investigation, remediation support

## KNOWLEDGE DESK

~**Abutalib Syed**  
(Knowledge Executive)

~**Taher Pepermintwala**  
(FCA, CISA)