INTELLIGENCE BRIEFING
Security Command Center
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Ivanti Sentry Critical RCE and Auth Bypass Flaws Enable Unauthenticated Root Access (CVE-2026-10520, CVE-2026-10523)

CVE VULNERABILITY | **CRITICAL** | CVSS 9.5

SCC Item ID	SCC-CVE-2026-0283
Type	CVE Vulnerability
CVE ID	CVE-2026-10520, CVE-2026-10523
Severity	CRITICAL
CVSS Base Score	9.5
Affected Products	Ivanti Sentry (formerly MobileIron Sentry) versions prior to R10.5.2, R10.6.2, and R10.7.1
Published	2026-06-10T02:26:28
Discovery Source	Rss

Executive Summary

Ivanti disclosed two critical vulnerabilities in Sentry on June 10, 2026, that together allow an unauthenticated attacker to execute arbitrary commands as root and create rogue administrative accounts, resulting in full system compromise with no credentials required. Any organization running Ivanti Sentry versions prior to R10.5.2, R10.6.2, or R10.7.1 is at risk. As of the disclosure date, no public proof-of-concept or confirmed active exploitation had been reported. Ivanti network appliances have been mass-exploited by state-sponsored and ransomware actors following prior disclosures; this pattern makes immediate patching a business-critical priority.

Technical Analysis

Ivanti Sentry (formerly MobileIron Sentry) versions prior to R10.5.2, R10.6.2, and R10.7.1 are affected by two critical flaws disclosed June 10, 2026. CVE-2026-10520 (CWE-78, CWE-250) is a pre-authentication OS command injection vulnerability rated CVSS 10.0. It permits unauthenticated remote code execution as root over the network with low attack complexity, representing complete system compromise. CVE-2026-10523 (CWE-287) is an authentication bypass enabling unauthenticated creation of administrative accounts. Chained, these flaws allow an attacker to gain root shell access (T1190, T1059, T1068) and simultaneously establish persistent privileged accounts (T1078, T1078.004, T1098, T1136) on the gateway device, enabling lateral movement (T1021) into the protected network segment. No PoC or active exploitation was confirmed at time of disclosure. Fixed versions R10.5.2, R10.6.2, and R10.7.1 are available via the Ivanti Security Advisory. Source:

Ivanti Security Advisory (CVE-2026-10520, CVE-2026-10523), WatchTowr Labs technical analysis.

Action Checklist

1. Step 1: Containment, Identify all Ivanti Sentry instances in your environment immediately. If internet-facing, restrict access to the Sentry administrative interface (port 8443/admin UI) to management network ranges only via firewall ACL or security group rule. If running on an unpatched version (any build prior to R10.5.2, R10.6.2, or R10.7.1), treat the device as potentially compromised until patched and verified. Reference: NIST AC-4 (Information Flow Enforcement).
2. Step 2: Detection, Query firewall and web access logs for unexpected POST or GET requests to Sentry administrative endpoints, particularly any unauthenticated sessions to management interfaces. Review local account databases on the Sentry appliance for accounts created after your last known-good baseline (aligns with T1136, T1098). Check for anomalous outbound connections from the Sentry host. Reference: NIST AU-6 (Audit Record Review, Analysis, and Reporting); NIST AU-12 (Audit Record Generation); D3-LAM (Local Account Monitoring); D3-SFA (System File Analysis). No confirmed public IOCs (IPs, hashes, domains) were available at time of disclosure, do not treat absence of known IOCs as absence of compromise.
3. Step 3: Eradication, Apply the fixed Ivanti Sentry builds: R10.5.2, R10.6.2, or R10.7.1, per the Ivanti Security Advisory published June 10, 2026. Follow Ivanti's upgrade path documentation for your current version. After patching, audit all administrative accounts on the appliance and remove any accounts not present in your authorized account inventory. Rotate all credentials and API keys associated with the Sentry device. Reference: NIST SI-2 (Flaw Remediation); CIS 7.3 (Perform Automated Operating System Patch Management); CIS 7.4 (Perform Automated Application Patch Management); D3-CRO (Credential Rotation).
4. Step 4: Recovery, After patching, validate the installed version via the Ivanti admin console version string. Confirm no unauthorized administrative accounts remain (compare against CIS 5.1 account inventory baseline). Re-enable full network access to the appliance only after version and account validation is complete. Monitor Sentry logs and downstream authentication systems for at least 72 hours post-patch for signs of persistence or lateral movement activity. Reference: NIST AU-6; CIS 5.1 (Establish and Maintain an Inventory of Accounts); CIS 5.3 (Disable Dormant Accounts); D3-LAM.
5. Step 5: Post-Incident, Review whether MFA is enforced on all administrative access to Sentry and connected management systems. Reference: CIS 6.5 (Require MFA for Administrative Access); NIST AC-6 (Least Privilege); CIS 5.4 (Restrict Administrator Privileges to Dedicated Administrator Accounts). Assess whether network segmentation prevents a compromised Sentry appliance from directly reaching internal systems. Reference: NIST AC-4 (Information Flow Enforcement). Document this event as evidence for the next risk assessment cycle and verify your vulnerability management SLA covers network gateway appliances. Reference: CIS 7.1 (Establish and Maintain a Vulnerability Management Process).

IR / Forensic Enrichment

Triage Priority	IMMEDIATE

Escalation Criteria	Escalate immediately to senior IR leadership and legal/compliance if any evidence of rogue account creation (CVE-2026-10523), successful unauthenticated POST requests to the Sentry admin API, or outbound C2 connections from the Sentry appliance is confirmed — given that Sentry proxies mobile device authentication and may hold EAS credentials or MDM enrollment tokens, confirmed exploitation constitutes a potential PII/PHI breach triggering regulatory notification obligations under HIPAA, GDPR, or applicable state breach notification laws.
Recovery Notes	Before re-enabling full network access post-patch, verify the installed Sentry build string matches R10.5.2, R10.6.2, or R10.7.1 via the admin console and confirm via 'rpm -qa | grep -i sentry' or equivalent package query on the appliance OS. Monitor Sentry MICS logs and downstream MDM/EAS authentication logs for a minimum of 72 hours post-patch, specifically watching for device enrollment anomalies or authentication events tied to accounts not present in your authorized inventory — state-sponsored actors targeting prior Ivanti vulnerabilities have demonstrated persistence via implants that survive appliance reboots. If the appliance was confirmed compromised or unpatched for longer than 48 hours after disclosure, consider a full factory reset and re-enrollment rather than patch-in-place, as root-level RCE (CVE-2026-10520) provides sufficient access to tamper with the upgrade verification mechanism itself.
Forensic Artifacts	Ivanti Sentry MICS service logs at '/var/log/mics/mics.log' and '/var/log/mics/mics-error.log': the CVE-2026-10523 auth bypass will manifest as HTTP 200 responses to admin API endpoints (e.g., '/mics/services/') from sessions with no valid authentication token, and the CVE-2026-10520 RCE payload will appear as anomalous POST bodies or command injection strings in the request URI or parameters logged by the MICS Tomcat-based service. | '/etc/passwd' and '/var/log/secure' (or '/var/log/auth.log'): rogue administrative account creation via CVE-2026-10523 will leave new UID entries in '/etc/passwd' with timestamps post-dating your last known-good configuration backup, and corresponding 'useradd' entries in the auth log with process parent 'mics' or 'java' rather than an authorized administrator shell session. | '/tmp', '/var/tmp', and '/dev/shm' directory contents with full inode timestamps: CVE-2026-10520 unauthenticated root RCE is the exploit class most commonly used to stage web shells, reverse shell scripts, or reconnaissance tooling in world-writable directories; file creation timestamps in these paths correlated against the auth bypass log entries establish the exploit-to-post-exploitation timeline. | Root and service account crontabs ('crontab -l -u root', '/etc/cron.d/*', '/etc/cron.hourly/*'): threat actors exploiting prior Ivanti appliance CVEs (including CVE-2023-38035 affecting the same product line) have used cron-based persistence to re-establish C2 after reboots; entries not present in a pre-incident configuration baseline are high-confidence indicators of attacker persistence. | Network flow logs or firewall session logs for the Sentry appliance IP on outbound ports 443, 4444, 8080, and 1337 (common reverse shell and C2 ports): given that state-sponsored actors have mass-exploited prior Ivanti Sentry vulnerabilities within days of disclosure, outbound connections initiated by the 'java' or 'mics' process to non-Ivanti cloud infrastructure are a primary indicator of active C2 beaconing following CVE-2026-10520 exploitation.

Per-Action IR Details

Step 1: Containment — Identify all Ivanti Sentry instances in your environment immediately. If internet-facing, restrict access to the Sentry administrative interface (port 8443/admin UI) to management network ranges only via firewall ACL or security group rule. If running on an unpatched version (any build prior to R10.5.2, R10.6.2, or R10.7.1), treat the device as potentially compromised until patched and verified. Reference: NIST AC-4 (Information Flow Enforcement).

NIST Phase: Containment

Reference: NIST 800-61r3 §3.3 — Containment Strategy

Controls: NIST AC-4 (Information Flow Enforcement), CIS 4.4 (Implement and Manage a Firewall on Servers), CIS 1.1 (Establish and Maintain Detailed Enterprise Asset Inventory)

Compensating: Run 'nmap -p 8443 --open ' from a jump host to enumerate all listening Sentry admin interfaces on your network. Apply host-based iptables rules on the Sentry appliance itself: 'iptables -I INPUT -p tcp --dport 8443 ! -s -j DROP' as an immediate ACL if perimeter firewall changes require change-control delay. Document every Sentry instance found and its current version string retrieved from the admin UI at https://:8443/mics/services/ping or equivalent version endpoint.

Evidence: Before isolating, capture a full 'netstat -anp' or 'ss -tulnp' output from the Sentry appliance to record all active connections at time of containment — authenticated root-level sessions or unexpected outbound connections from the appliance process (mics, tomcat, or sshd) are high-fidelity indicators of prior exploitation of CVE-2026-10520. Record the current running version string from the Sentry admin console and preserve it as a baseline artifact.

Step 2: Detection — Query firewall and web access logs for unexpected POST or GET requests to Sentry administrative endpoints, particularly any unauthenticated sessions to management interfaces. Review local account databases on the Sentry appliance for accounts created after your last known-good baseline (aligns with T1136, T1098). Check for anomalous outbound connections from the Sentry host. Reference: NIST AU-6 (Audit Record Review, Analysis, and Reporting); NIST AU-12 (Audit Record Generation); D3-LAM (Local Account Monitoring); D3-SFA (System File Analysis). No confirmed public IOCs (IPs, hashes, domains) were available at time of disclosure — do not treat absence of known IOCs as absence of compromise.

NIST Phase: Detection Analysis

Reference: NIST 800-61r3 §3.2 — Detection and Analysis

Controls: NIST AU-6 (Audit Record Review, Analysis, And Reporting), NIST AU-12 (Audit Record Generation), NIST AU-2 (Event Logging), CIS 8.2 (Collect Audit Logs)

Compensating: On the Sentry appliance (CentOS/RHEL-based), run: 'grep -E "POST|GET" /var/log/mics/mics.log | grep -v """ to isolate unauthenticated requests to the admin API. For rogue account detection, run: 'getent passwd | awk -F: "$3 >= 1000 {print}"' and compare against your authorized account list; also check '/etc/passwd' modification timestamp with 'stat /etc/passwd'. Use Wireshark or tcpdump ('tcpdump -i eth0 -w /tmp/sentry_capture.pcap host ') on a network tap or span port to capture outbound sessions initiated from the Sentry host, which would indicate post-exploitation C2 activity following CVE-2026-10520 RCE.

Evidence: Capture and preserve: (1) Full contents of '/var/log/mics/mics.log' and '/var/log/mics/mics-error.log' — the Sentry MICS service logs all admin API requests including unauthenticated ones that are the hallmark of CVE-2026-10523 auth bypass; (2) '/etc/passwd' and '/etc/shadow' (hashed) with file timestamps to detect T1136 rogue account creation enabled by the auth bypass chain; (3) Shell history files at '/root/.bash_history' and '/home/*/.bash_history' for evidence of interactive post-exploitation commands executed under CVE-2026-10520 RCE; (4) Output of 'last' and 'lastb' commands to identify interactive logins or failed login attempts against newly created rogue accounts.

Step 3: Eradication — Apply the fixed Ivanti Sentry builds: R10.5.2, R10.6.2, or R10.7.1, per the Ivanti Security Advisory published June 10, 2026. Follow Ivanti's upgrade path documentation for your current version. After patching, audit all administrative accounts on the appliance and remove any accounts not present in your authorized account inventory. Rotate all credentials and API keys associated with the Sentry device. Reference: NIST SI-2 (no mapped control from provided knowledge base for SI-2 — patch management); CIS 7.3 (Perform Automated Operating System Patch Management); CIS 7.4 (Perform Automated Application Patch Management); D3-CRO (Credential Rotation).

NIST Phase: Eradication

Reference: NIST 800-61r3 §3.4 — Eradication

Controls: CIS 7.3 (Perform Automated Operating System Patch Management), CIS 7.4 (Perform Automated Application Patch Management), CIS 5.1 (Establish and Maintain an Inventory of Accounts), CIS 4.7 (Manage Default Accounts on Enterprise Assets and Software), NIST AC-2 (Account Management)

Compensating: Download the Ivanti Sentry R10.5.2/R10.6.2/R10.7.1 upgrade package directly from the Ivanti Product Portal (requires entitlement login at portal.ivanti.com) — do not source from third-party mirrors. Before upgrading, take a full VM snapshot or appliance backup if your platform supports it. Post-patch, enumerate all local accounts with 'cut -d: -f1 /etc/passwd' and compare against your CIS 5.1 account inventory; delete unauthorized accounts with 'userdel -r '. Rotate the Sentry API key/service account credentials stored in connected MDM or UEM platforms (e.g., Ivanti UEM, MobileIron Core) that authenticate to Sentry, as these may have been harvested during exploitation of CVE-2026-10520.

Evidence: Before applying the patch, preserve a binary image or snapshot of the compromised appliance's OS disk if forensic investigation is warranted — patching will overwrite file artifacts left by the CVE-2026-10520 RCE exploit payload. Specifically capture: (1) '/tmp' and '/var/tmp' directory listings and contents, common staging locations for dropper scripts or reverse shells placed via unauthenticated RCE; (2) Crontab entries ('crontab -l -u root', 'cat /etc/cron.*/*') for persistence mechanisms installed post-exploitation; (3) Running process list ('ps auxf') before patching to identify any attacker-spawned processes still active under the root context granted by CVE-2026-10520.

Step 4: Recovery — After patching, validate the installed version via the Ivanti admin console version string. Confirm no unauthorized administrative accounts remain (compare against CIS 5.1 account inventory baseline). Re-enable full network access to the appliance only after version and account validation is complete. Monitor Sentry logs and downstream authentication systems for at least 72 hours post-patch for signs of persistence or lateral movement activity. Reference: NIST AU-6; CIS 5.1 (Establish and Maintain an Inventory of Accounts); CIS 5.3 (Disable Dormant Accounts); D3-LAM.

NIST Phase: Recovery

Reference: NIST 800-61r3 §3.5 — Recovery

Controls: NIST AU-6 (Audit Record Review, Analysis, And Reporting), CIS 5.1 (Establish and Maintain an Inventory of Accounts), CIS 5.3 (Disable Dormant Accounts), CIS 6.2 (Establish an Access Revoking Process)

Compensating: Validate the patched version by querying the Sentry version API endpoint ('curl -sk https://:8443/mics/services/ping') and confirming the build string matches R10.5.2, R10.6.2, or R10.7.1. For 72-hour post-patch monitoring without a SIEM, configure a cron job on a Linux monitoring host to poll Sentry MICS logs every 15 minutes: 'tail -n 200 /var/log/mics/mics.log | grep -E "401|403|POST /mics"' and pipe output to a timestamped file for analyst review. Also monitor downstream Active Directory or LDAP for new privileged group memberships ('net group "Domain Admins" /domain') that could indicate lateral movement from a Sentry foothold established before patching.

Evidence: During the 72-hour monitoring window, collect and timestamp: (1) Sentry MICS service logs at '/var/log/mics/' to detect any continued exploitation attempts against the now-patched appliance, which would indicate active adversary targeting; (2) Authentication logs from downstream systems that Sentry proxies (e.g., ActiveSync, MDM enrollment endpoints) for anomalous device enrollments or EAS profile changes that could reflect attacker-controlled mobile device registration using rogue accounts created via CVE-2026-10523; (3) DNS query logs from the Sentry appliance's resolver to identify C2 beacon domains if a persistent implant survived patching by residing outside the patched code path (e.g., in a cron job or modified startup script).

Step 5: Post-Incident — Review whether MFA is enforced on all administrative access to Sentry and connected management systems. Reference: CIS 6.5 (Require MFA for Administrative Access); NIST AC-6 (Least Privilege); CIS 5.4 (Restrict Administrator Privileges to Dedicated Administrator Accounts). Assess whether network segmentation prevents a compromised Sentry appliance from directly reaching internal systems. Reference: NIST AC-4 (Information Flow Enforcement). Document this event as evidence for the next risk assessment cycle and verify your vulnerability management SLA covers network gateway appliances. Reference: CIS 7.1 (Establish and Maintain a Vulnerability Management Process).

NIST Phase: Post Incident

Reference: NIST 800-61r3 §4 — Post-Incident Activity

Controls: CIS 6.5 (Require MFA for Administrative Access), NIST AC-6 (Least Privilege), CIS 5.4 (Restrict Administrator Privileges to Dedicated Administrator Accounts), NIST AC-4 (Information Flow Enforcement), CIS 7.1 (Establish and Maintain a Vulnerability Management Process), CIS 7.2 (Establish and Maintain a Remediation

Process)

Compensating: For MFA enforcement on Sentry administration without enterprise IAM tooling, configure RADIUS-based MFA using a free solution such as FreeRADIUS integrated with a TOTP provider (e.g., Google Authenticator PAM module) for the Sentry admin interface if Ivanti's native MFA integration supports it. To validate network segmentation, run a point-in-time connectivity test from the Sentry appliance's IP to critical internal assets ('nmap -p 445,3389,22 --source-ip ') from an authorized test host to confirm firewall rules block lateral paths. Update your vulnerability management SLA documentation to explicitly include network appliances and edge devices, as these have been the highest-priority targets in Ivanti-specific threat campaigns.

Evidence: For the lessons-learned record, document: (1) The time delta between Ivanti's advisory publication (June 10, 2026) and your team's detection of vulnerable instances — this gap is a direct metric for NIST 800-61r3 §4 process improvement; (2) Whether any of the rogue accounts created via CVE-2026-10523 were used to authenticate to downstream systems (Active Directory join operations, MDM policy pushes, EAS profile deployments) — this establishes the actual blast radius for breach notification scoping; (3) Network flow logs showing what internal resources the Sentry appliance had layer-3 reachability to at the time of potential compromise, to support risk assessment documentation and any required regulatory disclosure analysis.

Detection Guidance

No confirmed public IOCs were available at time of disclosure. Detection should focus on behavioral indicators. Review Sentry appliance access logs for unauthenticated requests to administrative endpoints; any session reaching privileged functions without a preceding authentication event is anomalous. Query logs for account creation events (T1136) on the Sentry device that post-date your last verified account audit, and cross-reference against CIS 5.1 account inventory. Look for unexpected outbound connections from the Sentry host IP, particularly to external IPs on non-standard ports (indicative of post-exploitation C2 or data exfiltration, T1021). Enable and review AU-12 audit record generation on the appliance if not already active. Use D3-SFA (System File Analysis) to monitor for modifications to system executables, authentication databases, and configuration files on the Sentry host. D3-LAM (Local Account Monitoring) should flag any local accounts created outside normal provisioning windows. Note: Ivanti appliances have historically been targeted with web shell implants following exploitation; inspect web-accessible directories for unexpected files. Escalation flag: if anomalous accounts or outbound connections are detected pre-patch, treat as active compromise and initiate your IR plan.

Indicators of Compromise

Type	Value	Context	Confidence
URL	`no confirmed IOCs at time of disclosure`	No public indicators of compromise (IPs, domains, hashes, URLs) were confirmed in available sources at the time of this advisory. Monitor threat intelligence feeds for updates.	LOW

Framework Mappings

MITRE-ATTACK

- **T1078.004** — Cloud Accounts
- **T1059** — Command and Scripting Interpreter

- **T1136** — Create Account
- **T1021** — Remote Services
- **T1078** — Valid Accounts
- **T1068** — Exploitation for Privilege Escalation
- **T1190** — Exploit Public-Facing Application
- **T1098** — Account Manipulation

NIST-800-53R5

- **CM-7** — Least Functionality
- **SI-3** — Malicious Code Protection
- **SI-4** — System Monitoring
- **SI-7** — Software, Firmware, and Information Integrity
- **AC-2** — Account Management
- **AC-6** — Least Privilege
- **AC-17** — Remote Access
- **AC-3** — Access Enforcement
- **IA-2** — Identification and Authentication (Organizational Users)
- **IA-5** — Authenticator Management
- **SC-7** — Boundary Protection
- **SI-2** — Flaw Remediation
- **CA-8** — Penetration Testing
- **RA-5** — Vulnerability Monitoring and Scanning
- **SI-10** — Information Input Validation
- **IA-8** — Identification and Authentication (Non-Organizational Users)
- **IR-5** — Incident Monitoring

OWASP-TOP10-2021

- **A03:2021** — Injection
- **A01:2021** — Broken Access Control
- **A07:2021** — Identification and Authentication Failures

CIS-V8

- **2.5** — Allowlist Authorized Software
- **16.10** — Apply Secure Design Principles in Application Architectures
- **5.4** — Restrict Administrator Privileges to Dedicated Administrator Accounts
- **6.8** — Define and Maintain Role-Based Access Control
- **6.3** — Require MFA for Externally-Exposed Applications
- **6.4** — Require MFA for Remote Network Access
- **6.5** — Require MFA for Administrative Access
- **7.3** — Perform Automated Operating System Patch Management

- **7.4** — Perform Automated Application Patch Management

SOC2-TSC

- **CC6.1** — The entity implements logical access security software, infrastructure, and architectures over protected information assets

HIPAA-SECURITY

- **164.312(d)** — Person or Entity Authentication

ISO-27001-2022

- **A.8.8** — Management of technical vulnerabilities
- **A.5.23** — Information security for use of cloud services

NIST-CSF-2

- **DE.AE-08** — Incidents are declared when adverse events meet the defined incident criteria

MITRE ATT&CK Mapping

Technique ID	Technique Name	Tactic
T1078.004	Cloud Accounts	Defense-Evasion
T1059	Command and Scripting Interpreter	Execution
T1136	Create Account	Persistence
T1021	Remote Services	Lateral-Movement
T1078	Valid Accounts	Defense-Evasion
T1068	Exploitation for Privilege Escalation	Privilege-Escalation
T1190	Exploit Public-Facing Application	Initial-Access
T1098	Account Manipulation	Persistence

Sources

Source	URL	Tier
Security News	https://www.bleepingcomputer.com/news/security/new-max-severity-iva...	T3
Security Advisory Ivanti Sentry (CVE-2026-10520, CVE-2026-10523)	https://hub.ivanti.com/s/article/Security-Advisory-Ivanti-Sentry-CV...	T3

Source	URL	Tier
More Evidence That Words Don't Mean What We Thought They ...	https://labs.watchtowr.com/more-evidence-that-words-dont-mean-what-...	T3
CVE-2026-1323: TYPO3 Extension RCE Vulnerability - SentinelOne	https://www.sentinelone.com/vulnerability-database/cve-2026-1323/	T3
CVE-2026-1523 Detail - NVD	https://nvd.nist.gov/vuln/detail/CVE-2026-1523	T1
NVD	https://nvd.nist.gov/vuln/detail/CVE-2026-10520, CVE-2026-10523	T1

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