

## Ivanti Endpoint Manager Mobile Authentication Bypass Vulnerability

### Zero-day vulnerabilities exploited in the wild

<https://forums.ivanti.com/s/article/CVE-2023-35078-Remote-unauthenticated-API-access-vulnerability>  
 CVEs: [CVE-2023-35081](#), [CVE-2023-35078](#)

Ivanti Endpoint Manager Mobile (EPMM, formerly MobileIron Core) contains an authentication bypass vulnerability (CVE-2023-35078) that allows unauthenticated access to specific API paths and a path traversal vulnerability (CVE-2023-35081). An attacker with access to these API paths can access personally identifiable information (PII) such as names, phone numbers, and other mobile device details for users on a vulnerable system. An attacker can also make other configuration changes including installing software and modifying security profiles on registered devices.

**Background** Ivanti Endpoint Manager Mobile (EPMM) is a software used to manage endpoints running specifically mobile devices running on iOS, Android etc. Successful exploitation could lead to various security risks, including but not limited to:

- Unauthorized access to sensitive information stored within Ivanti EPMM
- Unauthorized administrative actions, compromising the integrity and availability of the data and resources
- Unintended disclosure of confidential data

**Announced** July 24, 2023: The Norwegian National Security Authority (NSM) has confirmed that attackers used a zero-day vulnerability in Ivanti's Endpoint Manager Mobile (EPMM) solution to breach a software platform used by 12 ministries in the country.

July 31, 2023: CISA issued an advisory regarding the vulnerability, and add the vulnerabilities into their Known Exploited Vulnerabilities (KEV) list.  
<https://www.cisa.gov/news-events/cybersecurity-advisories/aa23-213a>

**Latest Developments** In response to the identified vulnerabilities, Ivanti has released patches for versions 11.8.1.1, 11.9.1.1, and 11.10.0.  
 CVE-2023-35081: <https://forums.ivanti.com/s/article/KB-Arbitrary-File-Write-CVE-2023-35081>  
 CVE-2023-35078: <https://forums.ivanti.com/s/article/KB-Remote-unauthenticated-API-access-vulnerability-CVE-2023-35078>

Aug 8, 2023: FortiGuard Labs released IPS signature to address the vulnerability (CVE-2023-35078) and detect any attack attempts. IPS signature for the vulnerability (CVE-2023-35081) is currently being investigated. It is strongly recommended to apply patches as per vendor notes.

## PROTECT

Countermeasures across the security fabric for protecting assets, data and network from cybersecurity events:

Reconnaissance

Weaponization

Delivery

### AV

Detects known malware related to Ivanti Endpoint Manager Mobile (CVE-2023-35078 and CVE-2023-35081)

 FortiGate DB 91.05642	 FortiWeb DB 91.05642	 FortiClient DB 91.05642	 FortiSASE DB 91.05642	 FortiMail DB 91.05642	 FortiCASB DB 91.05642	 FortiCWP DB 91.05642
 FortiADC DB 91.05642	 FortiProxy DB 91.05642					

### AV (Pre-filter)

Detects known malware related to Ivanti Endpoint Manager Mobile (CVE-2023-35078 and CVE-2023-35081)

 FortiEDR DB 91.05642	 FortiSandbox DB 91.05642	 FortiNDR DB 91.05642
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Exploitation

### IPS

Detects and blocks attack attempts targeting Ivanti Endpoint Manager Mobile (CVE-2023-35078)

 FortiGate DB 25.618	 FortiSASE DB 25.618	 FortiNDR DB 25.618	 FortiADC DB 25.618	 FortiProxy DB 25.618
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### Web App Security

Detects and blocks attack attempts targeting Ivanti Endpoint Manager Mobile (CVE-2023-35078)

 FortiWeb DB 0.00355	 FortiADC DB 1.00044
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Installation

C2

Action

## DETECT

Find and correlate important information to identify an outbreak, the following updates are available to raise alert and generate reports:

### Outbreak Detection

 FortiAnalyzer DB 2.00016
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### Threat Hunting

 FortiAnalyzer v6.4+	 FortiSIEM v6.6+
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### Content Update

 FortiSIEM DB 318
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## RESPOND

Develop containment techniques to mitigate impacts of security events:

### Automated Response

Services that can automatically respond to this outbreak.

 FortiXDR
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### Assisted Response Services

Experts to assist you with analysis, containment and response activities.

 Incident Response	 FortiRecon: ACI
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## RECOVER

Improve security posture and processes by implementing security awareness and training, in preparation for (and recovery from) security incidents:

### NOC/SOC Training

Train your network and security professionals and optimize your incident response to stay on top of the cyberattacks.

 NSE Training	 Response Readiness
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### End-User Training

Raise security awareness to your employees that are continuously being targeted by phishing, drive-by download and other forms of cyberattacks.

 Security Awareness & Training
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## IDENTIFY

Identify processes and assets that need protection:

### Attack Surface Hardening

Check Security Fabric devices to build actionable configuration recommendations and key indicators.

 Security Rating
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### Business Reputation

Know attackers next move to protect against your business branding.

 FortiRecon: EASM
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## Additional Resources

- Bleeping Computer** <https://www.bleepingcomputer.com/news/security/ivanti-discloses-new-critical-auth-bypass-bug-in-mobileiron-core/>
- The Hacker News** <https://thehackernews.com/2023/07/ivanti-releases-urgent-patch-for-epmm.html>
- The Record** <https://therecord.media/ivanti-urges-customers-to-apply-patch>

Learn more about [FortiGuard Outbreak Alerts](#)