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BITSIGHT SECURITY RESEARCH

# The Near Miss: Unpacking the xz library incident

Explore the critical sequence of events that almost led to a widespread cybersecurity disaster through the exploitation of the widely used xz compression library—an insightful analysis brought to you by the Bitsight TRACE security research team.

## Timeline of Events

**1. Jia Tan's Contributions**
Over three years, a developer earns trust, leading to maintainer control over the library.

**2. Patch Introduction**
A "routine" patch opens the door to exploitation.

**3. Malicious Payload Discovery**
Anomalies in performance lead to the discovery of the backdoor.

**4. Remediation**
Community and developers rally to patch and mitigate threats quickly.

## OpenSSH and Systemic Risk

**Bitsight TRACE researchers set out to answer the question:**

"How many SSH servers use OpenSSH and are running on Operating Systems that use systemd—and therefore would have eventually used the backdoored xz library in future releases?"

**38.3M**
SSH servers were identified globally in 2024.

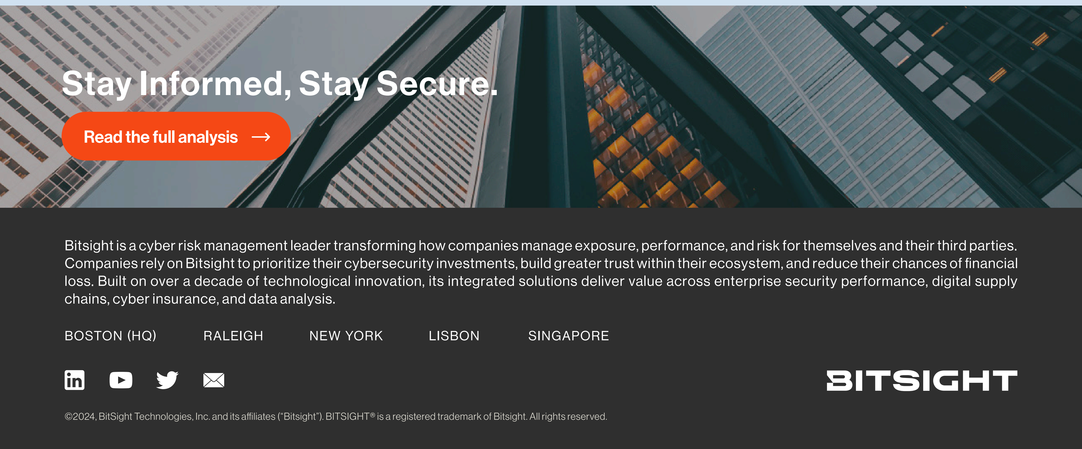
**~26M**
of identified SSH servers are running OpenSSH.

**70%**
Of SSH servers were running OpenSSH and could have been affected had the backdoor not been discovered.

**Potential widespread impact due to the ubiquity of OpenSSH in server operations.**

## "Lessons Learned"

- The importance of community vigilance.
- The need for robust maintenance protocols for open-source projects
- Rapid response capabilities to secure digital infrastructures.



## Stay Informed, Stay Secure.

Read the full analysis →

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