localhost

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Vulnerabilities by Host

Vulnerabilities by Host

127.0.0.1

CRITICAL	HIGH	MEDIUM	LOW	INFO
1	0	0	0	0

Host Information

IP:	127.0.0.1
MAC Address:	00:0C:29:47:12:6A
OS:	Linux Kernel 6.12.33+kali-amd64

Vulnerabilities

190856 - Node.js 18.x < 18.19.1 / 20.x < 20.11.1 / 21.x < 21.6.2 Multiple Vulnerabilities (Wednesday February 14 2024 Security Releases).

Synopsis

Node.js - JavaScript run-time environment is affected by multiple vulnerabilities.

Description

The version of Node.js installed on the remote host is prior to 18.19.1, 20.11.1, 21.6.2. It is, therefore, affected by multiple vulnerabilities as referenced in the Wednesday February 14 2024 Security Releases advisory.

- On Linux, Node.js ignores certain environment variables if those may have been set by an unprivileged user while the process is running with elevated privileges with the only exception of CAP_NET_BIND_SERVICE. Due to a bug in the implementation of this exception, Node.js incorrectly applies this exception even when certain other capabilities have been set. This allows unprivileged users to inject code that inherits the process's elevated privileges. Impacts: Thank you, to Tobias Nieen for reporting this vulnerability and for fixing it. (CVE-2024-21892)

- A vulnerability in Node.js HTTP servers allows an attacker to send a specially crafted HTTP request with chunked encoding, leading to resource exhaustion and denial of service (DoS). The server reads an unbounded number of bytes from a single connection, exploiting the lack of limitations on chunk extension bytes. The issue can cause CPU and network bandwidth exhaustion, bypassing standard safeguards like timeouts and body size limits. Impacts: Thank you, to Bartek Nowotarski for reporting this vulnerability and thank you Paolo Insogna for fixing it. (CVE-2024-22019)

- The permission model protects itself against path traversal attacks by calling path.resolve() on any paths given by the user. If the path is to be treated as a Buffer, the implementation uses Buffer.from() to obtain a Buffer from the result of path.resolve(). By monkey-patching Buffer internals, namely, Buffer.prototype.utf8Write, the application can modify the result of path.resolve(), which leads to a path traversal vulnerability. Impacts: Please note that at the time this CVE was issued, the permission model is an experimental feature of Node.js. Thank you, to Tobias Nieen for reporting this vulnerability and for fixing it. (CVE-2024-21896)

- setuid() does not affect libuv's internal io_uring operations if initialized before the call to setuid().

This allows the process to perform privileged operations despite presumably having dropped such privileges through a call to setuid(). Impacts: Thank you, to valette for reporting this vulnerability and thank you Tobias Nieen for fixing it. (CVE-2024-22017)

- A vulnerability in the privateDecrypt() API of the crypto library, allowed a covert timing side-channel during PKCS#1 v1.5 padding error handling. The vulnerability revealed significant timing differences in decryption for valid and invalid ciphertexts. This poses a serious threat as attackers could remotely exploit the vulnerability to decrypt captured RSA ciphertexts or forge signatures, especially in scenarios involving API endpoints processing Json Web Encryption messages. Impacts: Thank you, to hkario for reporting this vulnerability and thank you Michael Dawson for fixing it. (CVE-2023-46809)

- Node.js depends on multiple built-in utility functions to normalize paths provided to node:fs functions, which can be overwritten with user-defined implementations leading to filesystem permission model bypass through path traversal attack. Impacts: Please note that at the time this CVE was issued, the permission model is an experimental feature of Node.js. Thank you, to xion for reporting this vulnerability and thank you Rafael Gonzaga for fixing it. (CVE-2024-21891)

- The Node.js Permission Model does not clarify in the documentation that wildcards should be only used as the last character of a file path. For example: --allow-fs-read=/home/node/.ssh/*.pub will ignore pub and give access to everything after .ssh/. Impacts: Please note that at the time this CVE was issued, the permission model is an experimental feature of Node.js. Thank you, to Tobias Nieen for reporting this vulnerability and thank you Rafael Gonzaga for fixing it. (CVE-2024-21890)

Note that Nessus has not tested for these issues but has instead relied only on the application's self-reported version number.

See Also

http://www.nessus.org/u?313add11

Solution

Upgrade to Node.js version 18.19.1 / 20.11.1 / 21.6.2 or later.

Risk Factor

Critical

CVSS v3.0 Base Score

9.8 (CVSS:3.0/AV:N/AC:L/PR:N/UI:N/S:U/C:H/I:H/A:H)

CVSS v3.0 Temporal Score

8.5 (CVSS:3.0/E:U/RL:O/RC:C)

VPR Score

5.9

EPSS Score

0.1041

CVSS v2.0 Base Score

10.0 (CVSS2#AV:N/AC:L/Au:N/C:C/I:C/A:C)

CVSS v2.0 Temporal Score

7.4 (CVSS2#E:U/RL:OF/RC:C)

STIG Severity

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References

CVE	CVE-2023-46809
CVE	CVE-2024-21890
CVE	CVE-2024-21891
CVE	CVE-2024-21892
CVE	CVE-2024-21896
CVE	CVE-2024-22017
CVE	CVE-2024-22019
XREF	IAVB:2024-B-0016-S

Plugin Information

Published: 2024/02/21, Modified: 2025/04/03

Plugin Output

tcp/0

```
Path              : /usr/lib/python3/dist-packages/playwright/driver/node
Installed version : 20.11.0
Fixed version     : 20.11.1
```