

Denial of Service (DoS)

Affecting [fast-string-search](#) package, versions *

INTRODUCED: 3 FEB 2022 CVE-2022-22138 ?

CWE-400 ?

FIRST ADDED BY SNYK

Share ▼

How to fix?

There is no fixed version for `fast-string-search`.

Overview

[fast-string-search](#) is a module that can search substrings in a string by using N-API and boyer-moore-magiclen.

Affected versions of this package are vulnerable to Denial of Service (DoS) when computations are incorrect for non-string inputs. One can cause the V8 to attempt reading from non-permitted locations and cause a segmentation fault due to the violation.

PoC

```
const fss = require('fast-string-search'); let
res1 = fss.indexOfSkip("no way this will", "w");
let res2 = fss.indexOfSkip(1, 1);
console.log(res1); console.log(res2); // you can
also crash it after a very long useless
computation, by running this instead of lines 6-
11: let a = new Array(10000) let res2 =
fss.indexOfSkip(1, 1); // segfaults after 5
seconds
```



Snyk CVSS

Exploit Maturity Proof of concept ?

Attack Complexity Low ?

Availability HIGH ?

[See more](#)

> NVD

7.5 HIGH

Do your applications use this vulnerable package?

In a few clicks we can analyze your entire application and see what components are vulnerable

in your application, and suggest you quick fixes.

Details

Denial of Service (DoS) describes a family of attacks, all aimed at making a system inaccessible to its intended and legitimate users.

Unlike other vulnerabilities, DoS attacks usually do not aim at breaching security. Rather, they are focused on making websites and services unavailable to genuine users resulting in downtime.

One popular Denial of Service vulnerability is DDoS (a Distributed Denial of Service), an attack that attempts to clog network pipes to the system by generating a large volume of traffic from many machines.

When it comes to open source libraries, DoS vulnerabilities allow attackers to trigger such a crash or crippling of the service by using a flaw either in the application code or from the use of open source libraries.

Two common types of DoS vulnerabilities:

- High CPU/Memory Consumption- An attacker sending crafted requests that could cause the system to take a disproportionate amount of time to process. For example, [commons-fileupload:commons-fileupload](#).
- Crash - An attacker sending crafted requests that could cause the system to crash. For Example, [npm ws package](#)

Test your applications

 **Snyk Learn**

Learn about Denial of Service (DoS) vulnerabilities in an interactive lesson.

Start learning

SnykSNYK-JS-
ID **FASTSTRINGSEARCH-
2392367**

Published **15 Jun 2022**

Disclosed **3 Feb 2022**

CreditCristian-Alexandru
Staicu

Report a new vulnerability

Found a mistake?

PRODUCT

Snyk Open Source

Snyk Code

[Snyk Container](#)

[Snyk Infrastructure as Code](#)

[Test with Github](#)

[Test with CLI](#)

RESOURCES

[Vulnerability DB](#)

[Documentation](#)

[Disclosed Vulnerabilities](#)

[Blog](#)

[FAQs](#)

COMPANY

[About](#)

[Jobs](#)

[Contact](#)

[Policies](#)

[Do Not Sell My Personal Information](#)

CONTACT US

[Support](#)

[Report a new vuln](#)

[Press Kit](#)

[Events](#)

FIND US ONLINE

TRACK OUR DEVELOPMENT



Join the >>
community

Registered in England and Wales. Company number: 09677925

Registered address: Highlands House, Basingstoke Road, Spencers Wood, Reading, Berkshire, RG7 1NT.