

NODE.JS DEPENDENCIES AUDIT REPORT







EXECUTIVE SUMMARY

Vital Block has performed the automated and manual analysis of the Node.js code. The code was reviewed for common contract vulnerabilities and centralized exploits. Here's a quick audit summary:

Status	Critical !	Major "	Medium # 🛑	Minor \$ •	Unknown %
SECURITY	0	0	2	2	0
POPULARITY	0	0	1	2	0
MAINTENANCE	0	0	0	2	1
COMMUNITY	ACTIVE				

BITX-BACKEND Package Health Score 92/100.



Please note that The Written Node.js Code aren't resistant to exploits, vulnerabilities and/or hacks. and cryptography assets utilize new and emerging technologies. These technologies present a high level of ongoing risks. For a detailed understanding of risk severity, source code vulnerability, and audit limitations, kindly review the audit report thoroughly.

Please note that centralization privileges regardless of their inherited risk status - constitute an elevated impact on npm safety and security.





SCOPE OF WORK

Vital Block was consulted by BitX to conduct the Backend Audit of its Node.js source code. The audit scope of work is strictly limited to mentioned Node.js file only:

O Bitx-Backend

Source Code and/or interfaces dependencies are not checked due to being out of scope.

Verify audited Source code and project file below:

Language	
Node.js	
Project Name	BITX - BACKEND
License:	MIT
SECURITY	NO KNOWN SECURITY ISSUES





SECURITY CATEGORIES

Quickly assess the security posture of an open source project and its past versions. Further connecting your project with Snyk will offer fix advice and automations that enable security at scale and speed.

Risk Type	Definition
Critical !	These risks could be exploited easily and can lead to asset loss, data loss, asset, or data manipulation. They should be fixed right away.
Major "	These risks are hard to exploit but very important to fix, they carry an elevated risk of Source code manipulation, which can lead to high-risk severity.
Medium #	These risks should be fixed, as they carry an inherent risk of future exploits, and hacks which may or may not impact the source code execution. Low-risk reentrancy-related vulnerabilities should be fixed to deterexploits.
Minor \$	These risks do not pose a considerable risk to the contract or those who interact with it. They are code-style violations and deviations from standard practices. They should be highlighted and fixed nonetheless.
Unknown %	These risks pose uncertain severity to the contract or those who interact with it. They should be fixed immediately to mitigate the riskuncertainty.

All statuses which are identified in the audit report are categorized here for the reader to review:

Status Type	Definition
Open	Risks are open.
Acknowledged	Risks are acknowledged, but not fixed.
Resolved	Risks are acknowledged and fixed.





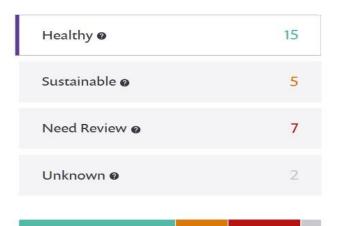
Dependencies Health Report

DIRECT DEPENDENCIES 29 PACKAGES GRADED

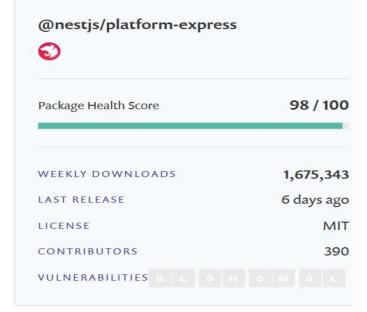
27 /
29

AVG. SCORE

Health Check



15 packages are healthy

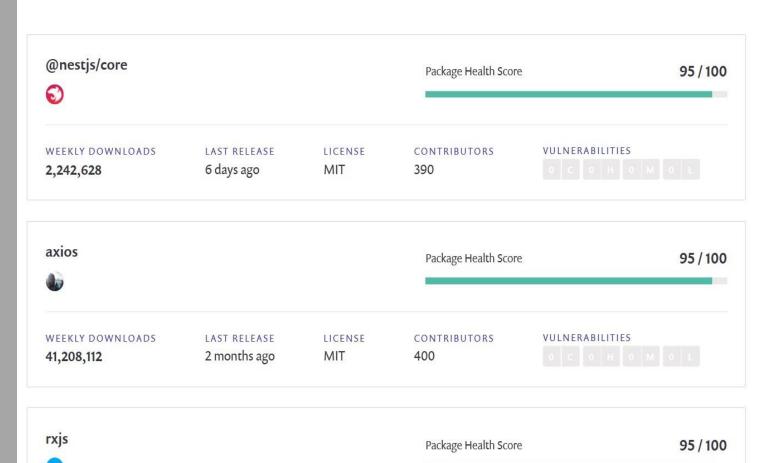








15 Packages are healthy

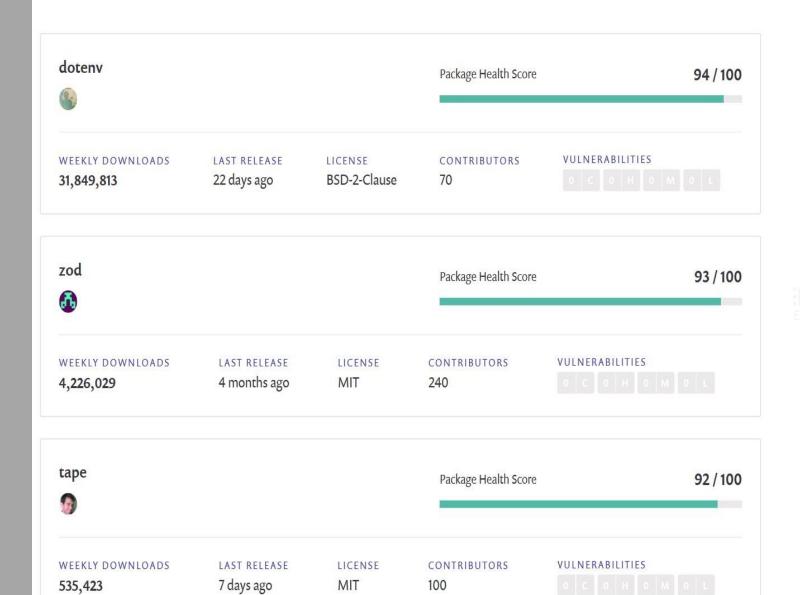








15 Packages are healthy







15 Packages are healthy



@nestjs/schedule			Package Health Scor	e 89/1
WEEKLY DOWNLOADS	LAST RELEASE	LICENSE	CONTRIBUTORS	VULNERABILITIES
527,823	22 days ago	MIT	30	

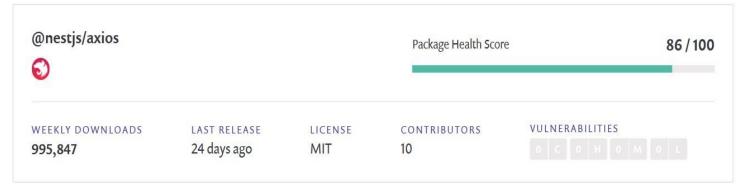
bitcoinjs-lib			Package Health Scor	e 89 / 1
WEEKLY DOWNLOADS	LAST RELEASE	LICENSE	CONTRIBUTORS	VULNERABILITIES
95,200	1 month ago	MIT	90	





15 packages are healthy



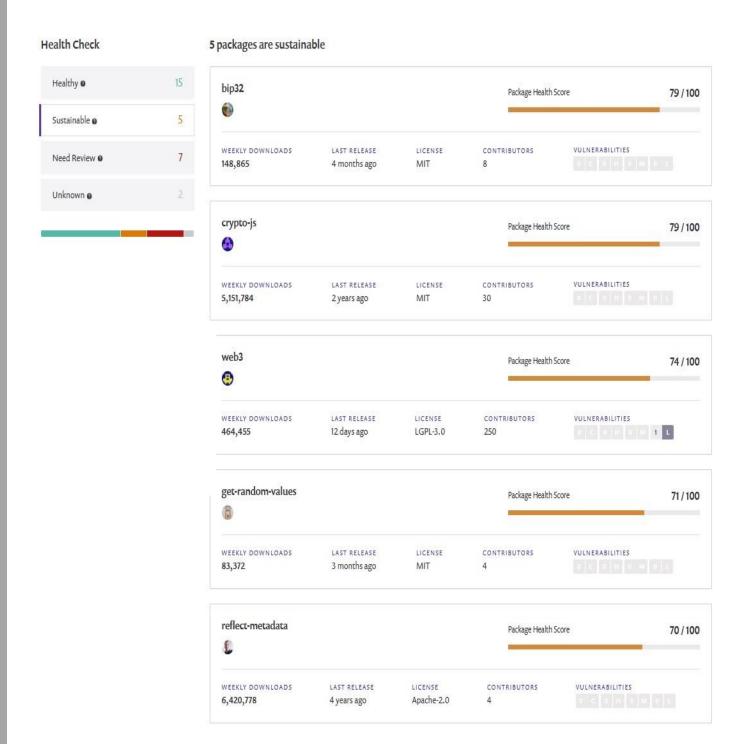








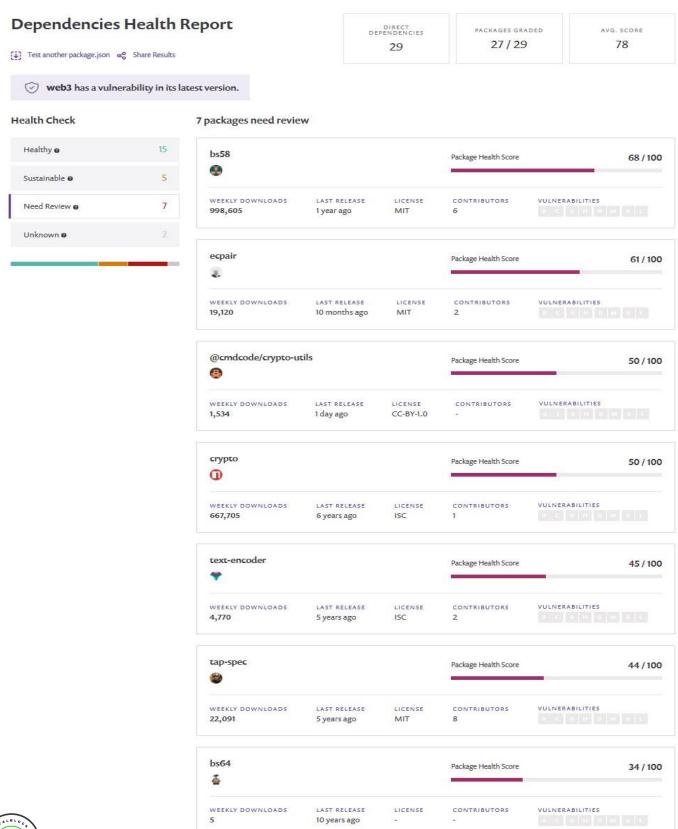
5 packages are Sustainable







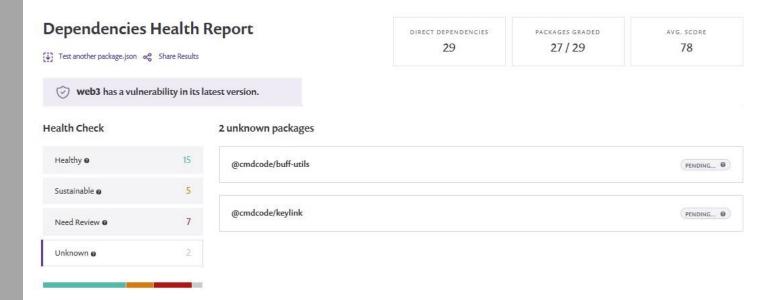
7 packages need review







2 unknown packages







FZT-01 PACKAGE OVERFLOW

Category	Severity •	Location	Status
Inconsistency	Informational	@nestjs/platform-express	Acknowledged

Description

In jest, the following equation is used inside an unchecked block

```
"test:watch": "jest --watch",
   "test:cov": "jest --coverage",
   "test:debug": "node --inspect-brk -r tsconfig-paths/register -r ts-node/register
node_modules/.bin/jest --runInBand",
   "test:e2e": "jest --config ./test/jest-e2e.json"
},
```

The function jest () does not have the override specifier. It should be noted that since -- > a function that overrides only a single interface function does not require the override specifier (see doc). However, all other instances of this in the code base contain the override specifier.

Recommendation

We recommend either checking and Ensure you're using the healthiest npm packages





FZT-02 SECURITY OVERFLOW

Category	Severity •	Location	Status
Dependencies Health	Informational	nest-cli.json	Acknowledged

Inside Code

```
{
    "collection": "@nestjs/schematics",
    «SourceRoot": "src"
}
```

Security NO KNOWN SECURITY ISSUES @

SECURITY POLICY Yes

All security vulnerabilities belong to production dependencies of direct and indirect packages.

SECURITY AND LICENSE RISK FOR SIGNIFICANT VERSIONS

All Versions

Version						Vu	lner	abili	ties				Li	cen	se R	isk	
10.0.5		07/2023															
9.4.3	1	06/2023	POPULAR	0	c	0	H	0	М	0		0	н	0	М	0	L
8.4.7		06/2022		0	C	0	Ħ	0	М	0		0	E	0	М	0	Ĺ
7.6.18		06/2021															
7.5.5		11/2020															
LICENSE	MI	Т															



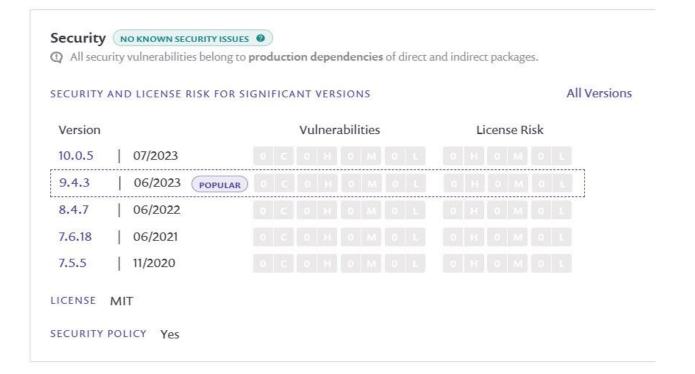


FZT-03 SECURITY OVERFLOW

Category	Severity •	Location	Status
Dependencies Health	Informational	@nestjs/core	Acknowledged

Start Code

```
"format": "prettier --write \"src/**/*.ts\" \"test/**/*.ts\"",
    "start": "nest start",
    "start:dev": "nest start --watch",
    "start:debug": "nest start --debug --watch",
    "start:prod": "node dist/main",
    "lint": "eslint \"{src,apps,libs,test}/**/*.ts\" --fix",
    "test": "jest"
```







FZT-03 POSSIBLE OVERFLOW

Category	Severity •	Location	Status
Dependencies Health	Informational	/npm-package/axios	Acknowledged

If you use require for importing, only default export is available:

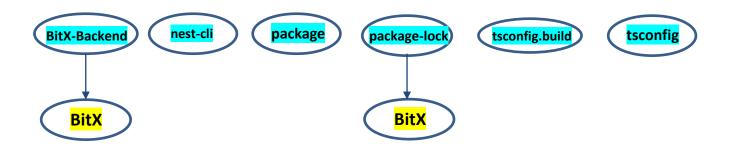
```
axios({ method: self.componentConfig["method"], url: self.componentConfig["action_path"],
data: self.componentConfig["data"], headers: { 'X-CSRF-Token':
document.getElementsByName("csrf-token")[0].getAttribute('content') }
```

CURITY	AND LICENSE RISK	FOR SIGN	IIFIC	ANT	VER	101	15								All V	ersions
Version				Vu	Iner	abili	ities				Li	cens	se Ri	sk		Package Health Score
1.4.0	04/2023															95 / 100
1.3.6	04/2023															SECURITY NO KNOWN SEC POPULARITY KEY ECOSYS
0.27.2	04/2022															MAINTENANCE COMMUNITY
0.26.1	03/2022															Explore Similar Packages
0.21.4	09/2021 PC	PULAR) c	0	E	0	М	0	L	0	H	0	М	0		got 97 express 91 fetch S0





INHERITANCE GRAPH



Identifier	Definition	Severity
CEN-16	Node.js Source Code privileges of BitX	Minor \$

Vulnerability 0 : No important security issue detected.

Threat level: Non





RECOMMENDATION

Project stakeholders should be consulted during the initial asset distribution process.

RECOMMENDATION

Align the team with a shared definition of clean code. Meet the defined standards every time with continuous feedback on code and a clear go/no-go quality gate in pull requests..

ALLEVIATION

BitX project team understands the risk. Some functions are provided privileged access to ensure a good runtime behaviour in the project.





Identifier	Definition	Severity
COD-18	Third Party Dependencies	Minor 🌑

The Source Code Node.js is interacting with third party protocols, protections code. The scope of the audit treats third party entities as black boxes and assumes their functional correctness. However, in the real world, third parties can be compromised, and exploited. Moreover, upgrades in third parties can create severe impacts, e.g., change code source, deprecation of previous routers, etc.

RECOMMENDATION

Inspect and validate third party dependencies regularly, and mitigate severe impacts whenever necessary.





DISCLAIMERS

Vital Block provides the easy-to-understand audit of Node.js, JavaScript and Raw source codes (commonly known as smart contracts).

The Node is Source code for this particular audit was analyzed for common contract vulnerabilities, and centralization exploits. This audit report makes no statements or warranties on the security of the code. This audit report does not provide any warranty or guarantee regarding the absolute bug-free nature of the smart contract analyzed, nor do they provide any indication of the client's business, business model or legal compliance. This audit report does not extend to the compiler layer, any other areas beyond the programming language, or other programming aspects that could present security risks. Cryptographic tokens are emergent technologies, they carry high levels of technical risks and uncertainty. You agree that your access and/or use, including but not limited to any services, reports, and materials, will be at your sole risk on an as-is, where-is, and as-available basis. This audit report could include false positives, false negatives, and other unpredictable results.

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Vital Block is Dedicated to Making Defi & Web3 A Safer Place. We are Powered by Security engineers, developers, Ul experts, and blockchain enthusiasts. Our team currently consists of 5 core members, and 4+ casual contributors.

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