

## Arbitrary File Write via Archive Extraction (Zip Slip)

Affecting [zip-local](#) package, versions <0.3.5

INTRODUCED: 29 DEC 2021
CVE-2021-23484
CWE-29
FIRST ADDED BY SNYK

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### How to fix?

Upgrade `zip-local` to version 0.3.5 or higher.

### Overview

`zip-local` is a to zip and unzip local directories

Affected versions of this package are vulnerable to Arbitrary File Write via Archive Extraction (Zip Slip) which can lead to an extraction of a crafted file outside the intended extraction directory.

### PoC:

```
var zipper = require('zip-local'); zipper.unzip("zipslip.zip", function(error, unzipped) { if(!error) { //
extract to the current working directory unzipped.save(null, function() { }); var unzippedfs =
unzipped.memory(); } }); Execute the following commands 1. npm install zip-local # Install affected module
2. zipslip example file can be found at - https://github.com/snyk/zip-slip-
vulnerability/blob/master/archives/zip-slip.zip 3. node poc.js # Run the PoC
```

### Details

It is exploited using a specially crafted zip archive, that holds path traversal filenames. When exploited, a filename in a malicious archive is concatenated to the target extraction directory, which results in the final path ending up outside of the target folder. For instance, a zip may hold a file with a `"../file.exe"` location and thus break out of the target folder. If an executable or a configuration file is overwritten with a file containing malicious code, the problem can turn into an arbitrary code execution issue quite easily.

The following is an example of a zip archive with one benign file and one malicious file. Extracting the malicious file will result in traversing out of the target folder, ending up in `/root/.ssh/` overwriting the `authorized_keys` file:

```
+2018-04-15 22:04:29 ..... 19 19 good.txt

+2018-04-15 22:04:42 ..... 20 20 ../../../../../../root/.ssh/authorized_keys
```

### References

- [Github Commit](#)
- [Vulnerable Code](#)

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### Snyk CVSS

Attack Complexity	Low
Confidentiality	HIGH
Integrity	HIGH
Availability	HIGH

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9.8 CRITICAL

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Snyk ID	SNYK-JS-ZIPLOCAL-2327477
Published	25 Jan 2022
Disclosed	29 Dec 2021
Credit	7he6uzzer

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