

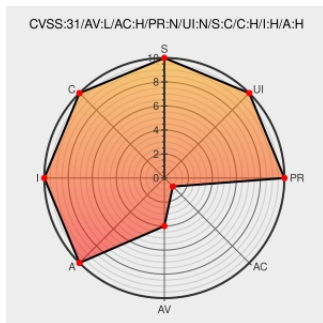


# CVE-2020-10021

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## CVE-2020-10021

[Source: Mitre](#)[Source: NIST](#)[CVE.ORG](#)[Print: PDF](#) 

Certain versions of [Zephyr](#) from [Zephyrproject](#) contain the following vulnerability:

Out-of-bounds Write in the USB Mass Storage memoryWrite handler with unaligned Sizes See NCC-ZEP-024, NCC-ZEP-025, NCC-ZEP-026 This issue affects: zephyrproject-rtos zephyr version 1.14.1 and later versions. version 2.1.0 and later versions.

CVE-2020-10021 has been assigned by [vulnerabilities@zephyrproject.org](#) to track the vulnerability - currently rated as **HIGH** severity.

Affected Vendor/Software: [zephyrproject-rtos](#) - [zephyr](#) version **>= 1.14.1**

Affected Vendor/Software: [zephyrproject-rtos](#) - [zephyr](#) version **>= 2.1.0**

CVSS3 Score: **7.8 - HIGH**

| Attack Vector    | Attack Complexity      | Privileges Required | User Interaction    |
|------------------|------------------------|---------------------|---------------------|
| <b>LOCAL</b>     | <b>LOW</b>             | <b>LOW</b>          | <b>NONE</b>         |
| Scope            | Confidentiality Impact | Integrity Impact    | Availability Impact |
| <b>UNCHANGED</b> | <b>HIGH</b>            | <b>HIGH</b>         | <b>HIGH</b>         |

CVSS2 Score: **4.6 - MEDIUM**

| Access Vector          | Access Complexity | Authentication      |
|------------------------|-------------------|---------------------|
| <b>LOCAL</b>           | <b>LOW</b>        | <b>NONE</b>         |
| Confidentiality Impact | Integrity Impact  | Availability Impact |
| <b>PARTIAL</b>         | <b>PARTIAL</b>    | <b>PARTIAL</b>      |

## CVE References

| Description | Tags | Link |
|-------------|------|------|
|-------------|------|------|

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                          |                                                                                                                                                                                   |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| usb: mass_storage: fix page buffer overflow, check LBA range by jfischer-no · Pull Request #23240 · zephyrproject-rtos/zephyr · GitHub                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <a href="#">Patch</a><br><a href="#">Third Party Advisory</a><br><a href="#">github.com</a><br><a href="#">text/html</a> |  <a href="#">MISC github.com/zephyrproject-rtos/zephyr/pull/23240</a>                            |
| usb: mass_storage: check LBA range by d3zd3z · Pull Request #23455 · zephyrproject-rtos/zephyr · GitHub                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <a href="#">Patch</a><br><a href="#">Third Party Advisory</a><br><a href="#">github.com</a><br><a href="#">text/html</a> |  <a href="#">MISC github.com/zephyrproject-rtos/zephyr/pull/23455</a>                            |
| [v2.1-branch] usb: mass_storage: check LBA range by d3zd3z · Pull Request #23456 · zephyrproject-rtos/zephyr · GitHub                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | <a href="#">Patch</a><br><a href="#">Third Party Advisory</a><br><a href="#">github.com</a><br><a href="#">text/html</a> |  <a href="#">MISC github.com/zephyrproject-rtos/zephyr/pull/23456</a>                            |
| Vulnerabilities — Zephyr Project Documentation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <a href="#">docs.zephyrproject.org</a><br><a href="#">text/html</a>                                                      |  <a href="#">MISC docs.zephyrproject.org/latest/security/vulnerabilities.html#cve-2020-10021</a> |
| [ZEPSEC-26] Out-of-bounds write in USB Mass Storage with unaligned sizes - Zephyr Project Security Issues                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | <a href="#">Third Party Advisory</a><br><a href="#">zephyrprojectsec.atlassian.net</a><br><a href="#">text/html</a>      |  <a href="#">MISC zephyrprojectsec.atlassian.net/browse/ZEPSEC-26</a>                            |
| By selecting these links, you may be leaving CVEreport webspace. We have provided these links to other websites because they may have information that would be of interest to you. No inferences should be drawn on account of other sites being referenced, or not, from this page. There may be other websites that are more appropriate for your purpose. CVEreport does not necessarily endorse the views expressed, or concur with the facts presented on these sites. Further, CVEreport does not endorse any commercial products that may be mentioned on these sites. Please address comments about any linked pages to <a href="mailto:comment@cve.report">comment@cve.report</a> . |                                                                                                                          |                                                                                                                                                                                   |

There are currently no QIDs associated with this CVE

| Known Affected Configurations (CPE V2.3) |                               |                        |         |        |         |          |
|------------------------------------------|-------------------------------|------------------------|---------|--------|---------|----------|
| Type                                     | Vendor                        | Product                | Version | Update | Edition | Language |
| Operating System                         | <a href="#">Zephyrproject</a> | <a href="#">Zephyr</a> | All     | All    | All     | All      |
| Operating System                         | <a href="#">Zephyrproject</a> | <a href="#">Zephyr</a> | All     | All    | All     | All      |
| Operating System                         | <a href="#">Zephyrproject</a> | <a href="#">Zephyr</a> | All     | All    | All     | All      |
| cpe:2.3:o:zephyrproject:zephyr:*****:    |                               |                        |         |        |         |          |
| cpe:2.3:o:zephyrproject:zephyr:*****:    |                               |                        |         |        |         |          |
| cpe:2.3:o:zephyrproject:zephyr:*****:    |                               |                        |         |        |         |          |

| Discovery Credit     |
|----------------------|
| NCC Group for report |

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