

To use *trivy* - run command :

```
docker run --rm -v ~/.trivy:/root/.cache/ aquasec/trivy:0.40.0 image
ghcr.io/mlflow/mlflow:v2.3.0 --severity HIGH,CRITICAL
```

Result :

```
C:\Taras\education\data-engineering>docker run --rm -v ~/.trivy:/root/.cache/ aquasec/trivy:0.40.0 image ghcr.io/mlflow/mlflow:v2.3.0 --severity HIGH,CRITICAL
2023-05-02T14:10:02.427Z INFO Vulnerability scanning is enabled
2023-05-02T14:10:02.427Z INFO Secret scanning is enabled
2023-05-02T14:10:02.427Z INFO If your scanning is slow, please try '--scanners vuln' to disable secret scanning
2023-05-02T14:10:02.427Z INFO Please see also https://aquasecurity.github.io/trivy/v0.40/docs/secret/scanning/#recommendation for faster secret detection
2023-05-02T14:10:03.057Z INFO Detected OS: debian
2023-05-02T14:10:03.057Z INFO Detecting Debian vulnerabilities...
2023-05-02T14:10:03.988Z INFO Number of language-specific files: 1
2023-05-02T14:10:03.988Z INFO Detecting python-pkg vulnerabilities...
2023-05-02T14:10:04.024Z INFO Table result includes only package filenames. Use '--format json' option to get the full path to the package file.

ghcr.io/mlflow/mlflow:v2.3.0 (debian 11.6)
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Total: 20 (HIGH: 19, CRITICAL: 1)
```

Library	Vulnerability	Severity	Installed Version	Fixed Version	Title
bash	CVE-2022-3715	HIGH	5.1-2+deb11u1		a heap-buffer-overflow in valid_parameter_transform https://avd.aquasec.com/nvd/cve-2022-3715
			1.46.2-2		e2fsprogs: out-of-bounds read/write via crafted filesystem https://avd.aquasec.com/nvd/cve-2022-1304
libcom-err2					
libdb5.3	CVE-2019-8457	CRITICAL	5.3.28+dfsg1-0.8		sqlite: heap out-of-bound read in function rtree_node() https://avd.aquasec.com/nvd/cve-2019-8457
libext2fs2	CVE-2022-1304	HIGH	1.46.2-2		e2fsprogs: out-of-bounds read/write via crafted filesystem https://avd.aquasec.com/nvd/cve-2022-1304
libgcrypt20	CVE-2021-33560		1.8.7-6		libgcrypt: mishandles ElGamal encryption because it lacks exponent blinding to address a... https://avd.aquasec.com/nvd/cve-2021-33560
libncursesw6	CVE-2022-29458		6.2+20201114-2	6.2+20201114-2+deb11u1	ncurses: segfaulting OOB read https://avd.aquasec.com/nvd/cve-2022-29458
	CVE-2023-29491				Local users can trigger security-relevant memory corruption via malformed data https://avd.aquasec.com/nvd/cve-2023-29491
libss2	CVE-2022-1304		1.46.2-2		e2fsprogs: out-of-bounds read/write via crafted filesystem https://avd.aquasec.com/nvd/cve-2022-1304
libssl1.1	CVE-2023-0464		1.1.1n-0+deb11u4		Denial of service by excessive resource usage in verifying X509 policy constraints... https://avd.aquasec.com/nvd/cve-2023-0464
libtinfo6	CVE-2022-29458		6.2+20201114-2	6.2+20201114-2+deb11u1	ncurses: segfaulting OOB read https://avd.aquasec.com/nvd/cve-2022-29458
	CVE-2023-29491				Local users can trigger security-relevant memory corruption via malformed data https://avd.aquasec.com/nvd/cve-2023-29491

To use *grype* - run command(on Ubuntu) :

```
curl -sSfL
https://raw.githubusercontent.com/anchore/grype/main/install.sh |
sh -s -- -b .

grype ghcr.io/mlflow/mlflow:v2.3.0
```

Result:

```
tarassito@DESKTOP-I9VMMOT:~/education$ grype ghcr.io/mlflow/mlflow:v2.3.0
  Vulnerability DB      [no update available]
  Parsed image
  Cataloged packages    [164 packages]
  Scanning image...     [112 vulnerabilities]
    └─ 3 critical, 26 high, 15 medium, 8 low, 59 negligible (1 unknown)
       12 fixed
```

NAME	INSTALLED	FIXED-IN	TYPE	VULNERABILITY	SEVERITY
Flask	2.2.3	2.3.2	python	GHSA-m2qf-hxjv-5gpg	High
apt	2.2.4		deb	CVE-2011-3374	Negligible
bash	5.1-2+deb11u1	(won't fix)	deb	CVE-2022-3715	High
bsdutils	1:2.36.1-8+deb11u1		deb	CVE-2022-0563	Negligible
certifi	2022.12.7	2022.12.07	python	GHSA-43fp-rhv2-5gv8	Medium
coreutils	8.32-4+b1		deb	CVE-2017-18018	Negligible
coreutils	8.32-4+b1	(won't fix)	deb	CVE-2016-2781	Low
docker	6.0.1		python	CVE-2018-10892	Medium
docker	6.0.1		python	CVE-2019-13139	High
docker	6.0.1		python	CVE-2019-13509	High
docker	6.0.1		python	CVE-2019-16884	High
docker	6.0.1		python	CVE-2019-5736	High

I didn't find how to filter SEVERITY in *grype*. But we can see more CVE in *grype* - 3 Critical , 26 High vs 1 Critical and 19 High in *trivy*.