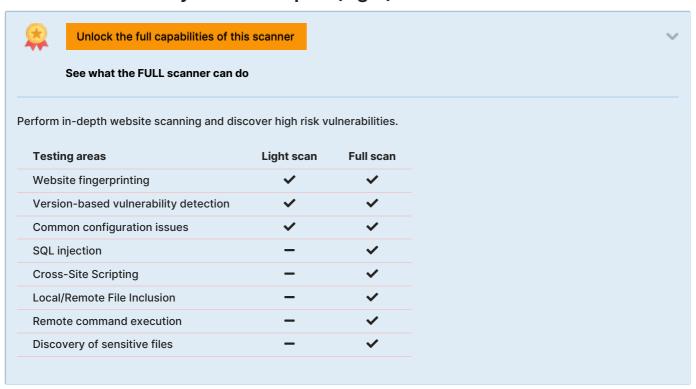


# Website Vulnerability Scanner Report (Light)



# ✓ https://www.turnitin.com/

Target created when starting a scan using the API

# **Summary**





## **Scan information:**

Start time: 2023-05-05 18:33:03 UTC+03
Finish time: 2023-05-05 18:33:49 UTC+03

Scan duration: 46 sec
Tests performed: 19/19
Scan status: Finis

# **Findings**

# Vulnerabilities found for server-side software

UNCONFIRMED (1)

Risk Level	cvss	CVE	Summary	Exploit	Affected software
•	4.3	CVE-2019-11358	jQuery before 3.4.0, as used in Drupal, Backdrop CMS, and other products, mishandles jQuery.extend(true, {},) because of Object.prototype pollution. If an unsanitized source object contained an enumerableproto property, it could extend the native Object.prototype.	N/A	jquery 3.3.1
•	4.3	CVE-2020-11022	In jQuery versions greater than or equal to 1.2 and before 3.5.0, passing HTML from untrusted sources - even after sanitizing it - to one of jQuery's DOM manipulation methods (i.ehtml(), .append(), and others) may execute untrusted code. This problem is patched in jQuery 3.5.0.	N/A	jquery 3.3.1

4.3	CVE-2020-11023

In jQuery versions greater than or equal to 1.0.3 and before 3.5.0, passing HTML containing <option> elements from untrusted sources - even after sanitizing it - to one of jQuery's DOM manipulation methods (i.e. .html(), .append(), and others) may execute untrusted code. This problem is patched in jQuery 3.5.0.

N/A

jquery 3.3.1

#### ▼ Details

#### **Risk description:**

These vulnerabilities expose the affected applications to the risk of unauthorized access to confidential data and possibly to denial of service attacks. An attacker could search for an appropriate exploit (or create one himself) for any of these vulnerabilities and use it to attack the system.

#### Recommendation:

We recommend you to upgrade the affected software to the latest version in order to eliminate the risk of these vulnerabilities.

#### Classification:

CWE: CWE-1026

OWASP Top 10 - 2013: A9 - Using Components with Known Vulnerabilities OWASP Top 10 - 2017: A9 - Using Components with Known Vulnerabilities

# Missing security header: Content-Security-Policy

CONFIRMED

URL	Evidence
https://www.turnitin.com/	Response headers do not include the HTTP Content-Security-Policy security header

#### ✓ Details

#### **Risk description:**

The Content-Security-Policy (CSP) header activates a protection mechanism implemented in web browsers which prevents exploitation of Cross-Site Scripting vulnerabilities (XSS). If the target application is vulnerable to XSS, lack of this header makes it easily exploitable by attackers.

### Recommendation

Configure the Content-Security-Header to be sent with each HTTP response in order to apply the specific policies needed by the application.

## References:

https://cheatsheetseries.owasp.org/cheatsheets/Content\_Security\_Policy\_Cheat\_Sheet.html https://developer.mozilla.org/en-US/docs/Web/HTTP/Headers/Content-Security-Policy

## Classification:

CWE: CWE-693

OWASP Top 10 - 2013: A5 - Security Misconfiguration OWASP Top 10 - 2017: A6 - Security Misconfiguration

# Missing security header: Referrer-Policy

CONFIRMED

URL	Evidence
https://www.turnitin.com/	Response headers do not include the Referrer-Policy HTTP security header as well as the <meta/> tag with name 'referrer' is not present in the response.

### ✓ Details

### Risk description:

The Referrer-Policy HTTP header controls how much referrer information the browser will send with each request originated from the current web application.

For instance, if a user visits the web page "http://example.com/pricing/" and it clicks on a link from that page going to e.g.

"https://www.google.com", the browser will send to Google the full originating URL in the Referer header, assuming the Referrer-Policy header is not set. The originating URL could be considered sensitive information and it could be used for user tracking.

### Recommendation:

The Referrer-Policy header should be configured on the server side to avoid user tracking and inadvertent information leakage. The value no-referrer of this header instructs the browser to omit the Referer header entirely.

#### References:

https://developer.mozilla.org/en-US/docs/Web/Security/Referer\_header:\_privacy\_and\_security\_concerns

#### Classification:

CWE : CWE-693

OWASP Top 10 - 2013: A5 - Security Misconfiguration OWASP Top 10 - 2017: A6 - Security Misconfiguration

# Missing security header: X-Content-Type-Options

CONFIRMED

URL	Evidence	
https://www.turnitin.com/	Response headers do not include the X-Content-Type-Options HTTP security header	

#### ✓ Details

## Risk description:

The HTTP header X-Content-Type-Options is addressed to the Internet Explorer browser and prevents it from reinterpreting the content of a web page (MIME-sniffing) and thus overriding the value of the Content-Type header). Lack of this header could lead to attacks such as Cross-Site Scripting or phishing.

#### Recommendation:

We recommend setting the X-Content-Type-Options header such as X-Content-Type-Options: nosniff.

#### References:

https://developer.mozilla.org/en-US/docs/Web/HTTP/Headers/X-Content-Type-Options

### Classification:

**CWE: CWE-693** 

OWASP Top 10 - 2013 : A5 - Security Misconfiguration OWASP Top 10 - 2017 : A6 - Security Misconfiguration

# Missing security header: X-XSS-Protection

CONFIRMED

URL	Evidence
https://www.turnitin.com/	Response headers do not include the HTTP X-XSS-Protection security header

### ▼ Details

### Risk description:

The X-XSS-Protection HTTP header instructs the browser to stop loading web pages when they detect reflected Cross-Site Scripting (XSS) attacks. Lack of this header exposes application users to XSS attacks in case the web application contains such vulnerability.

## Recommendation:

We recommend setting the X-XSS-Protection header to X-XSS-Protection: 1; mode=block.

### References:

https://developer.mozilla.org/en-US/docs/Web/HTTP/Headers/X-XSS-Protection

## Classification:

CWE: CWE-693

OWASP Top 10 - 2013 : A5 - Security Misconfiguration
OWASP Top 10 - 2017 : A6 - Security Misconfiguration

# Robots.txt file found

CONFIRMED

URL

https://www.turnitin.com/robots.txt

### ✓ Details

## Risk description:

There is no particular security risk in having a robots.txt file. However, this file is often misused by website administrators to try to hide some web pages from the users. This should not be considered a security measure because these URLs can be easily read directly from the robots.txt file.

#### Recommendation:

We recommend you to manually review the entries from robots.txt and remove the ones which lead to sensitive locations in the website (ex. administration panels, configuration files, etc).

#### References:

https://www.theregister.co.uk/2015/05/19/robotstxt/

#### Classification:

OWASP Top 10 - 2013 : A5 - Security Misconfiguration OWASP Top 10 - 2017 : A6 - Security Misconfiguration

# Server software and technology found

[UNCONFIRMED]

Software / Version	Category
€ jQuery CDN	CDN
(Dpen Graph	Miscellaneous
• Varnish	Caching
C Envoy	Reverse proxies
OT OneTrust	Cookie compliance
€ jQuery 3.3.1	JavaScript libraries
♦ Google Tag Manager	Tag managers
§ SmartRecruiters	Recruitment & staffing
<b>♦</b> HSTS	Security

# ✓ Details

# Risk description:

An attacker could use this information to mount specific attacks against the identified software type and version.

### **Recommendation:**

We recommend you to eliminate the information which permits the identification of software platform, technology, server and operating system: HTTP server headers, HTML meta information, etc.

### References

 $https://owasp.org/www-project-web-security-testing-guide/stable/4-Web\_Application\_Security\_Testing/01-Information\_Gathering/02-Fingerprint\_Web\_Server.html$ 

## Classification:

OWASP Top 10 - 2013 : A5 - Security Misconfiguration OWASP Top 10 - 2017 : A6 - Security Misconfiguration

# Security.txt file is missing

CONFIRMED

### URL

Missing: https://www.turnitin.com/.well-known/security.txt

## ✓ Details

### **Risk description:**

We have detected that the server is missing the security.txt file. There is no particular risk in not creating a valid Security.txt file for your server. However, this file is important because it offers a designated channel for reporting vulnerabilities and security issues.

## Recommendation:

We recommend you to implement the security.txt file according to the standard, in order to allow researchers or users report any security issues they find, improving the defensive mechanisms of your server.

#### References:

https://securitytxt.org/

#### Classification:

OWASP Top 10 - 2013 : A5 - Security Misconfiguration OWASP Top 10 - 2017 : A6 - Security Misconfiguration

- Website is accessible.
- Nothing was found for client access policies.
- Nothing was found for use of untrusted certificates.
- Nothing was found for enabled HTTP debug methods.
- Nothing was found for secure communication.
- Nothing was found for directory listing.
- Nothing was found for missing HTTP header Strict-Transport-Security.
- Nothing was found for missing HTTP header X-Frame-Options.
- Nothing was found for domain too loose set for cookies.
- Nothing was found for HttpOnly flag of cookie.
- Nothing was found for Secure flag of cookie.

# Scan coverage information

## List of tests performed (19/19)

- Checking for website accessibility...
- ✓ Checking for missing HTTP header Content Security Policy...
- ✓ Checking for missing HTTP header Referrer...
- ✓ Checking for missing HTTP header X-Content-Type-Options...
- Checking for missing HTTP header X-XSS-Protection...
- Checking for website technologies...
- Checking for vulnerabilities of server-side software...
- Checking for client access policies...
- ✓ Checking for robots.txt file...
- Checking for absence of the security.txt file...
- Checking for use of untrusted certificates...

- Checking for enabled HTTP debug methods...
- Checking for secure communication...
- Checking for directory listing...
- ✓ Checking for missing HTTP header Strict-Transport-Security...
- ✓ Checking for missing HTTP header X-Frame-Options...
- Checking for domain too loose set for cookies...
- Checking for HttpOnly flag of cookie...
- ✓ Checking for Secure flag of cookie...

# **Scan parameters**

Website URL: https://www.turnitin.com/

Scan type: Light Authentication: False

## Scan stats

Unique Injection Points Detected: 93
URLs spidered: 2
Total number of HTTP requests: 10

Average time until a response was

279ms

received: