## **ZAP Scanning Report**

## **Summary of Alerts**

Risk Level Number of Alerts

High0Medium0Low6Informational0

## **Alert Detail**

Low (Medium) X-Content-Type-Options Header Missing

Description The Anti-MIME-Sniffing header X-Content-Type-Options was not set to 'nosniff'. This

allows older versions of Internet Explorer and Chrome to perform MIME-sniffing on the response body, potentially causing the response body to be interpreted and displayed as a content type other than the declared content type. Current (early 2014) and legacy versions of Firefox will use the declared content type (if one is

set), rather than performing MIME-sniffing.

URL http://localhost:4200/

Method GET

Parameter X-Content-Type-Options

URL http://localhost:4200/main.bundle.js

Method GET

Parameter X-Content-Type-Options

URL http://localhost:4200

Method GET

Parameter X-Content-Type-Options

URL http://localhost:4200/inline.bundle.js

Method GET

Parameter X-Content-Type-Options

URL http://localhost:4200/styles.bundle.js

Method GET

Parameter X-Content-Type-Options

Instances 5

Solution Ensure that the application/web server sets the Content-Type header appropriately,

and that it sets the X-Content-Type-Options header to 'nosniff' for all web pages.

If possible, ensure that the end user uses a standards-compliant and modern web browser that does not perform MIME-sniffing at all, or that can be directed by the

web application/web server to not perform MIME-sniffing.

Other information This issue still applies to error type pages (401, 403, 500, etc) as those pages are

often still affected by injection issues, in which case there is still concern for

browsers sniffing pages away from their actual content type.

At "High" threshold this scanner will not alert on client or server error responses.

Reference http://msdn.microsoft.com/en-us/library/ie/gg622941%28v=vs.85%29.aspx

https://www.owasp.org/index.php/List of useful HTTP\_headers

CWE Id 16 WASC Id 15 Source ID 3

Low (Medium) Web Browser XSS Protection Not Enabled

Description Web Browser XSS Protection is not enabled, or is disabled by the configuration of the

'X-XSS-Protection' HTTP response header on the web server

URL http://localhost:4200

Method GET

Parameter X-XSS-Protection

URL http://localhost:4200/robots.txt

Method GET

Parameter X-XSS-Protection

URL http://localhost:4200/sitemap.xml

Method GET

Parameter X-XSS-Protection

URL http://localhost:4200/

Method GET

Parameter X-XSS-Protection

Instances 4

Solution Ensure that the web browser's XSS filter is enabled, by setting the X-XSS-Protection

HTTP response header to '1'.

Other information The X-XSS-Protection HTTP response header allows the web server to enable or

disable the web browser's XSS protection mechanism. The following values would

attempt to enable it:

X-XSS-Protection: 1; mode=block

X-XSS-Protection: 1; report=http://www.example.com/xss

The following values would disable it:

X-XSS-Protection: 0

The X-XSS-Protection HTTP response header is currently supported on Internet

Explorer, Chrome and Safari (WebKit).

Note that this alert is only raised if the response body could potentially contain an

XSS payload (with a text-based content type, with a non-zero length).

Reference https://www.owasp.org/index.php/XSS (Cross Site Scripting) Prevention Cheat Sheet

https://blog.veracode.com/2014/03/guidelines-for-setting-security-headers/

CWE Id 933 WASC Id 14 Source ID 3

Low (Medium) X-Content-Type-Options Header Missing

Description The Anti-MIME-Sniffing header X-Content-Type-Options was not set to 'nosniff'. This

allows older versions of Internet Explorer and Chrome to perform MIME-sniffing on the response body, potentially causing the response body to be interpreted and displayed as a content type other than the declared content type. Current (early 2014) and legacy versions of Firefox will use the declared content type (if one is

set), rather than performing MIME-sniffing.

URL http://localhost:8000/static/admin/css/login.css

Method GET

Parameter X-Content-Type-Options

URL http://localhost:8000/admin

Method GET

Parameter X-Content-Type-Options

URL http://localhost:8000/admin/login/?next=/admin/

Method GET

Parameter X-Content-Type-Options

URL http://localhost:8000/static/admin/css/base.css

Method GET

Parameter X-Content-Type-Options

Instances 4

Solution Ensure that the application/web server sets the Content-Type header appropriately,

and that it sets the X-Content-Type-Options header to 'nosniff' for all web pages.

If possible, ensure that the end user uses a standards-compliant and modern web browser that does not perform MIME-sniffing at all, or that can be directed by the

web application/web server to not perform MIME-sniffing.

Other information This issue still applies to error type pages (401, 403, 500, etc) as those pages are

often still affected by injection issues, in which case there is still concern for

browsers sniffing pages away from their actual content type.

At "High" threshold this scanner will not alert on client or server error responses.

Reference http://msdn.microsoft.com/en-us/library/ie/gg622941%28v=vs.85%29.aspx

https://www.owasp.org/index.php/List of useful HTTP headers

CWE Id 16 WASC Id 15 Source ID 3

Low (Medium) Web Browser XSS Protection Not Enabled

Description Web Browser XSS Protection is not enabled, or is disabled by the configuration of the

'X-XSS-Protection' HTTP response header on the web server

URL http://localhost:8000/sitemap.xml

Method GET

Parameter X-XSS-Protection

URL http://localhost:8000/admin

Method GET

Parameter X-XSS-Protection

URL http://localhost:8000/robots.txt

Method GET

Parameter X-XSS-Protection

URL http://localhost:8000/admin/login/?next=/admin/

Method GET

Parameter X-XSS-Protection

URL http://localhost:8000/admin/login/?next=/admin/

Method POST

Parameter X-XSS-Protection

Instances 5

Solution Ensure that the web browser's XSS filter is enabled, by setting the X-XSS-Protection

HTTP response header to '1'.

Other information The X-XSS-Protection HTTP response header allows the web server to enable or

disable the web browser's XSS protection mechanism. The following values would

attempt to enable it:

X-XSS-Protection: 1; mode=block

X-XSS-Protection: 1; report=http://www.example.com/xss

The following values would disable it:

X-XSS-Protection: 0

The X-XSS-Protection HTTP response header is currently supported on Internet

Explorer, Chrome and Safari (WebKit).

Note that this alert is only raised if the response body could potentially contain an

XSS payload (with a text-based content type, with a non-zero length).

Reference https://www.owasp.org/index.php/XSS\_(Cross\_Site\_Scripting)\_Prevention\_Cheat\_Sheet

https://blog.veracode.com/2014/03/guidelines-for-setting-security-headers/

CWE Id 933 WASC Id 14 Source ID 3

Low (Medium) Cookie No HttpOnly Flag

Description A cookie has been set without the HttpOnly flag, which means that the cookie can

be accessed by JavaScript. If a malicious script can be run on this page then the cookie will be accessible and can be transmitted to another site. If this is a session

cookie then session hijacking may be possible.

URL http://localhost:8000/admin/login/?next=/admin/

Method GET

Parameter csrftoken

Evidence Set-Cookie: csrftoken

URL http://localhost:8000/admin

Method GET

Parameter csrftoken

Evidence Set-Cookie: csrftoken

Instances 2

Solution Ensure that the HttpOnly flag is set for all cookies.

Reference http://www.owasp.org/index.php/HttpOnly

CWE Id 16 WASC Id 13 Source ID 3

Low (Medium) Password Autocomplete in Browser

Description The AUTOCOMPLETE attribute is not disabled on an HTML FORM/INPUT element

containing password type input. Passwords may be stored in browsers and

retrieved.

URL http://localhost:8000/admin/login/?next=/admin/

Method GET

Parameter id\_password

Evidence <input type="password" name="password" required id="id password" />

URL http://localhost:8000/admin

Method GET

Parameter id\_password

Evidence <input type="password" name="password" required id="id password" />

Instances 2

Solution Turn off the AUTOCOMPLETE attribute in forms or individual input elements

containing password inputs by using AUTOCOMPLETE='OFF'.

Reference http://www.w3schools.com/tags/att\_input\_autocomplete.asp

https://msdn.microsoft.com/en-us/library/ms533486%28v=vs.85%29.aspx

CWE Id 525 WASC Id 15 Source ID 3