

Ensure all the affected web applications and their corresponding owners implement these changes immediately.

Use the below guideline as a reference only. Implement the configuration as per OEM guidelines/recommendations.

1. Web server version exposed - Access web server settings, disable the server header to hide its information and save changes.
2. Improve web server security through these changes
 - a. Implement HSTS
 - b. Implement Content Security Policy
 - c. Implement HTTP (HPKP)
 - d. Implement X-Frame Options
 - e. Implement XXS Protection
 - f. Implement X Content Type Options
 - g. Implement X Permitted Cross Domain
 - h. Improve Referrer Policy

1. Web server version exposed - Access web server settings, disable the server header to hide its information and save changes.
2. Improve web server security through these changes

a. Implement HSTS

- Apache - Edit your apache configuration file and add the following to your VirtualHost. Header always set Strict-Transport-Security "max-age=63072000; includeSubdomains"
- nginx- Edit your nginx configuration file and add the following snippet.
add_header Strict-Transport-Security "max-age=63072000; includeSubdomains";
- lighttpd - Edit your lighttpd configuration file and add the following snippet.
setenv.add-response-header = ("Strict-Transport-Security" => "max-age=63072000; includeSubdomains",)

Add Custom HTTP Response Header [?] [X]

Name:

Value:

OK Cancel

- IIS - Go to

b. Implement Content Security Policy

- Apache - Edit your apache configuration file and add the following to your VirtualHost. Header always set Content-Security-Policy "default-src https: data: 'unsafe-inline' 'unsafe-eval'"
- nginx - `add_header Content-Security-Policy "default-src https: data: 'unsafe-inline' 'unsafe-eval'" always;`
- lighttpd - `setenv.add-response-header = ("Content-Security-Policy" => "script-src 'self'; object-src 'self'",)`
- IIS - For Windows Servers open up the IIS Manager, select the site you want to add the header to and select 'HTTP Response Headers'. Click the add button in the 'Actions' pane and then input the details for the header.

Add Custom HTTP Response Header [?] [X]

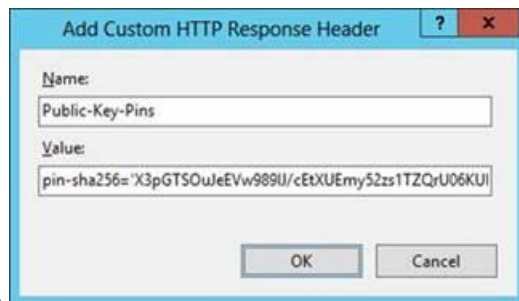
Name:

Value:

OK Cancel

c. Implement HTTP (HPKP)

- Apache - Edit your apache configuration file and add the following to your VirtualHost. Header set Public-Key-Pins "pin-sha256=\"kIO23nT2ehFDXCfx3eHTDRESMz3asj1muO+4aldjiuY=\"; pin-sha256=\"633lt352PKRXbOwf4xSEa1M517scpD3I5f79xMD9r9Q=\"; max-age=2592000; includeSubDomains"
- nginx - Edit your nginx configuration file and add the following snippet. add_header Public-Key-Pins "pin-sha256=\"kIO23nT2ehFDXCfx3eHTDRESMz3asj1muO+4aldjiuY=\"; pin-sha256=\"633lt352PKRXbOwf4xSEa1M517scpD3I5f79xMD9r9Q=\"; max-age=2592000; includeSubDomains";
- lighttpd - Edit your lighttpd configuration file and add the following snippet. setenv.add-response-header = ("Public-Key-Pins" => "pin-sha256=\"kIO23nT2ehFDXCfx3eHTDRESMz3asj1muO+4aldjiuY=\"; pin-sha256=\"633lt352PKRXbOwf4xSEa1M517scpD3I5f79xMD9r9Q=\"; max-age=2592000; includeSubDomains",)



- IIS -

d. Implement X-Frame Options

- Apache - Add this line below into your site's configuration to configure Apache to send X-Frame-Options header for all pages. Header set X-Frame-Options "DENY"
- nginx - Add snippet below into configuration file to send X-Frame-Options header. add_header X-Frame-Options "DENY";

- lighttpd - Add snippet below into configuration file to send X-Frame-Options header. `setenv.add-response-header = ("X-Frame-Options" => "DENY",)`

The screenshot shows a dialog box titled "Add Custom HTTP Response Header". It has a light blue border and a title bar with a question mark and a close button (X). Inside the dialog, there are two text input fields. The first is labeled "Name:" and contains the text "X-Frame-Options". The second is labeled "Value:" and contains the text "SAMEORIGIN". At the bottom of the dialog, there are two buttons: "OK" and "Cancel".

- IIS -

e. Implement XXS Protection

- Apache - Header set X-XSS-Protection "1; mode=block"
- nginx - `add_header X-XSS-Protection "1;mode=block";`
- lighttpd - `setenv.add-response-header = ("X-XSS-Protection" => "1; mode=block",)`

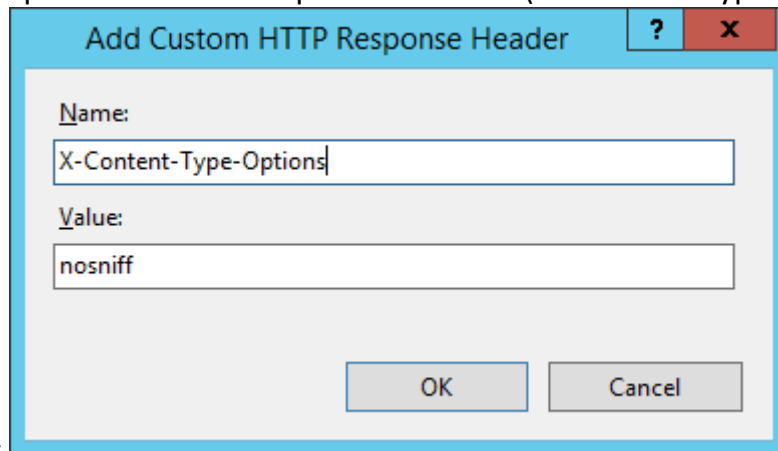
The screenshot shows a dialog box titled "Add Custom HTTP Response Header". It has a light blue border and a title bar with a question mark and a close button (X). Inside the dialog, there are two text input fields. The first is labeled "Name:" and contains the text "X-Xss-Protection". The second is labeled "Value:" and contains the text "1; mode=block". At the bottom of the dialog, there are two buttons: "OK" and "Cancel".

- IIS -

f. Implement X Content Type Options

- Apache - Header set X-Content-Type-Options "nosniff"
- nginx - `add_header X-Content-Type-Options "nosniff";`

- lighttpd - setenv.add-response-header = ("X-Content-Type-Options" => "nosniff",)



- IIS -

g. Implement X Permitted Cross Domain

- Apache - Header set X-Permitted-Cross-Domain-Policies "none"
- nginx - add_header X-Permitted-Cross-Domain-Policies "none";
- lighttpd - setenv.add-response-header = ("X-Permitted-Cross-Domain-Policies" => "none",)
- IIS - Same as above policies

h. Improve Referrer Policy

- Apache - Header set Referrer-Policy "no-referrer"
- nginx - add_header Referrer-Policy same-origin;
- lighttpd - setenv.add-response-header = ("Referrer-Policy" => "no-referrer",)
- IIS- Do it as mentioned above

Reference for most steps - <https://scotthelme.co.uk/hardening-your-http-response-headers/#content-security-policy>



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