

To secure ADSS Web RA server, the recommendations by OWASP are implemented.

1. Content Security Policy (CSP) are Not Implemented

Implemented content security policy by adding these in config file

```
<add name="Content-Security-Policy" value="object-src 'none'; default-src 'self'
https://client.go-sign-desktop.com:8782/gosign-desktop
https://netdna.bootstrapcdn.com; connect-src 'self' https://client.go-sign-
desktop.com:8782 ; child-src 'self' https://www.google.com/; script-src 'self' 'unsafe-
inline' 'unsafe-eval' https://www.google.com/recaptcha/
https://www.gstatic.com/recaptcha/; style-src 'self' 'unsafe-inline'; img-src 'self' * data:
blob:;" />
```

2. Version Disclosure

Add following tag inside rewrite tags:

```
<outboundRules>
    <rule name="Remove Server header">
        <match serverVariable="RESPONSE_Server" pattern="."+ />
        <action type="Rewrite" value="" />
    </rule>
</outboundRules>
```

3. Missing X-Frame-Options Header

Add following header in config file:

```
<add name="X-Frame-Options" value="DENY" />
```

4. Missing Invalid CYPHER

To fix this issue, enable CYPHER from windows register. For more information follow this link:

<https://support.microsoft.com/en-ie/help/245030/how-to-restrict-the-use-of-certain-cryptographic-algorithms-and-protoc>

5. Request Max-Length Issue

To fix max length issue, add following tag in web.config in <system.webServer> tag:

```
<security>
    <requestFiltering>
        <requestLimits maxQueryString="8192" />
    </requestFiltering>
</security>
```

6. Cookies not marked as HttpOnly

All cookies in ADSS Web RA Server are marked as secure except cookies used in anti-forgery token validation. To understand anti-forgery token validation, follow this link:

http://help.ascertia.com/webRA/#.insecure_cookie

7. HTTP Strict Transport Security (HSTS) Policy

To fix this issue, you need to turn on http redirection settings in IIS. For more information follow this link:

[IIS 10.0 Version 1709 HTTP Strict Transport Security \(HSTS\) Support | Microsoft Docs](#)