

SSLscan

sslscan is a command-line tool used to check the SSL/TLS configuration of a server. It helps in identifying the supported ciphers, protocols, and other SSL/TLS settings of a server, which is useful for ensuring the security and compliance of web services.

Features

1. **Protocol Support:** sslscan tests for support across various SSL/TLS protocol versions, including SSLv2, SSLv3, TLSv1.0, TLSv1.1, TLSv1.2, and TLSv1.3.
2. **Cipher Suite Testing:** It identifies which cipher suites are supported by the server and whether they are considered secure or deprecated.
3. **Certificate Details:** The tool retrieves and displays details about the server's SSL certificate, such as the issuer, validity period, and subject information.
4. **Renegotiation Support:** sslscan checks if the server supports secure renegotiation, a critical feature to prevent certain types of attacks.
5. **Fallback Scsv:** It tests for support of the TLS Fallback Signaling Cipher Suite Value (SCSV), which helps in mitigating protocol downgrade attacks.
6. **Key Exchange Groups:** The tool identifies the key exchange groups supported by the server, which is essential for ensuring the strength of the encryption.

Example: -

1. The basic usage of sslscan involves running the tool against a specified host and port. By default, it checks port 443, which is the default port for HTTPS.

```
(kali@kali)~$ sudo sslscan 3.77.143.178
[sudo] password for kali:
Version: 2.0.15-static
OpenSSL 1.1.1q-dev xx XXX xxxxx

Connected to 3.77.143.178

Testing SSL server 3.77.143.178 on port 443 using SNI name (kali.kali)

SSL/TLS Protocols:
SSLv2      disabled
SSLv3      disabled
TLSv1.0    disabled
TLSv1.1    disabled
TLSv1.2    enabled
TLSv1.3    enabled

TLS Fallback SCSV:
Server supports TLS Fallback SCSV

TLS renegotiation:
Session renegotiation not supported

TLS Compression:
Compression disabled

Heartbleed:
TLSv1.3 not vulnerable to heartbleed
TLSv1.2 not vulnerable to heartbleed

Supported Server Cipher(s):
Preferred TLSv1.3 128 bits TLS_AES_128_GCM_SHA256 Curve 25519 DHE 253
Accepted TLSv1.3 256 bits TLS_AES_256_GCM_SHA384 Curve 25519 DHE 253
Accepted TLSv1.3 256 bits TLS_CHACHA20_POLY1305_SHA256 Curve 25519 DHE 253
Preferred TLSv1.2 256 bits ECDHE-RSA-AES256-GCM-SHA384 Curve 25519 DHE 253
```

2. This command will only show the ciphers supported by the server (--no-failed) and will display the server's certificate details (--show-certificate).

```
(kali@kali)-[~]  
$ sudo sslscan --no-failed --show-certificate (kali@kali)-[~]  
Version: 2.0.15-static  
OpenSSL 1.1.1q-dev xx XXX xxxx  
Connected to 3.77.143.178  
Testing SSL server (kali@kali)-[~] on port 443 using SNI name (kali@kali)-[~]  
  
SSL/TLS Protocols:  
SSLV2 disabled  
SSLV3 disabled  
TLSv1.0 disabled  
TLSv1.1 disabled  
TLSv1.2 enabled  
TLSv1.3 enabled  
  
TLS Fallback SCSV:  
Server supports TLS Fallback SCSV  
  
TLS renegotiation:  
Session renegotiation not supported  
  
TLS Compression:  
Compression disabled  
  
Heartbleed:  
TLSv1.3 not vulnerable to heartbleed  
TLSv1.2 not vulnerable to heartbleed  
  
Supported Server Cipher(s):  
Preferred TLSv1.3 128 bits TLS_AES_128_GCM_SHA256 Curve 25519 DHE 253  
Accepted TLSv1.3 256 bits TLS_AES_256_GCM_SHA384 Curve 25519 DHE 253  
Accepted TLSv1.3 256 bits TLS_CHACHA20_POLY1305_SHA256 Curve 25519 DHE 253
```