OWASP DeepViolet TLS/SSL
JAVA API & Tools

Project Leader
Milton Smith
Twitter: @deepvioletapi
Blog: https://www.securitycurmudgeon.com/

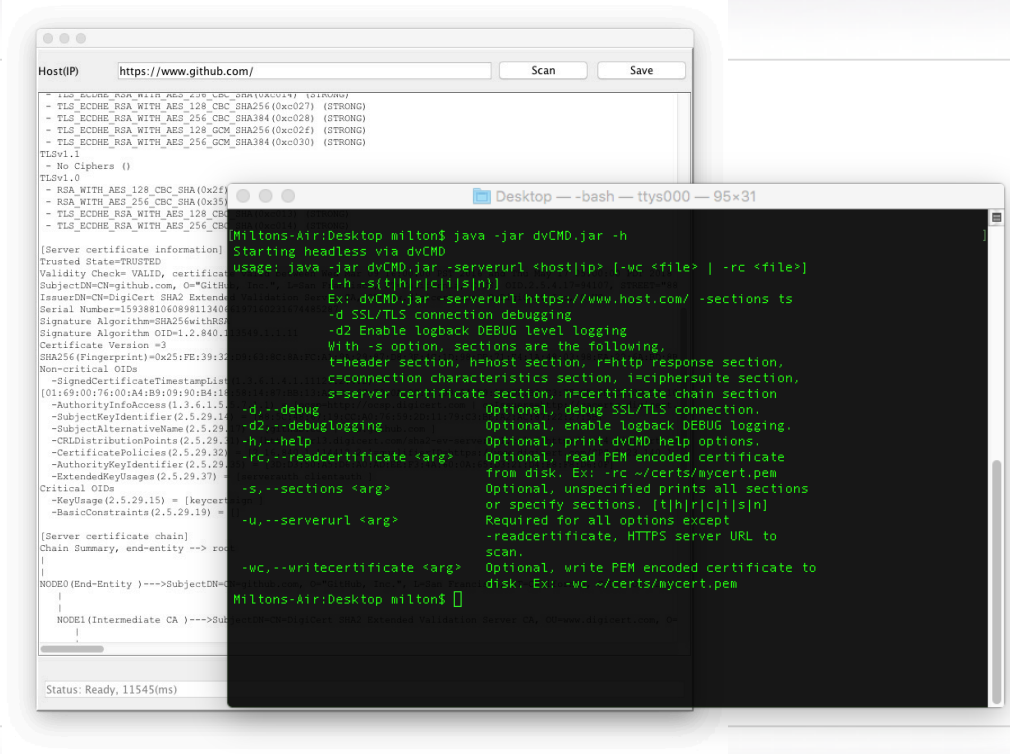
Black Hat EU 2016 London
Tools Arsenal

What is DeepViolet?

TLS/SSL scanning API

2 reference cases demonstrating API

Command line tool & desktop application



Why Build DeepViolet?

Why build DeepViolet(DV)? I did not set out to build a tool for the public.
DV was a learning tool for me. Heartbleed was in the popular press, I wanted to learn more about underlying TLS/SSL protocols. When I finished the original code I posted it to my github site.

I was approached several times to add improvements to DV.
Asked others why they liked it. Most common answer is that there are few available choices for libraries that provide TLS/SSL scanning features for applications.

Great tools exist today like OpenSSL, Qualys SSL Server Test, Mozilla Observatory, etc.
Yes, my favorites as well. No intention to compete with any tools.

What Can DeepViolet API/Tools Do?

Identify Weak Server Cipher Suites

Identity Weak Signature Algorithms

Identity Certificates About to Expire

Print X.509 Certificates & Metadata

Print Trust Chains

Print Trust Status, Trusted or Not Trusted

And more…

Getting Started with the API

```
IDSession session = DVFactory.initializeSession(url);

IDVOnEng eng = DVFactory.getIDVOnEng(session);

// Get certificates, ciphersuites, print some reports…
// Review unit tests in com.mps.deepviolet.test.api to get
started…
```

DeepViolet Desktop Application

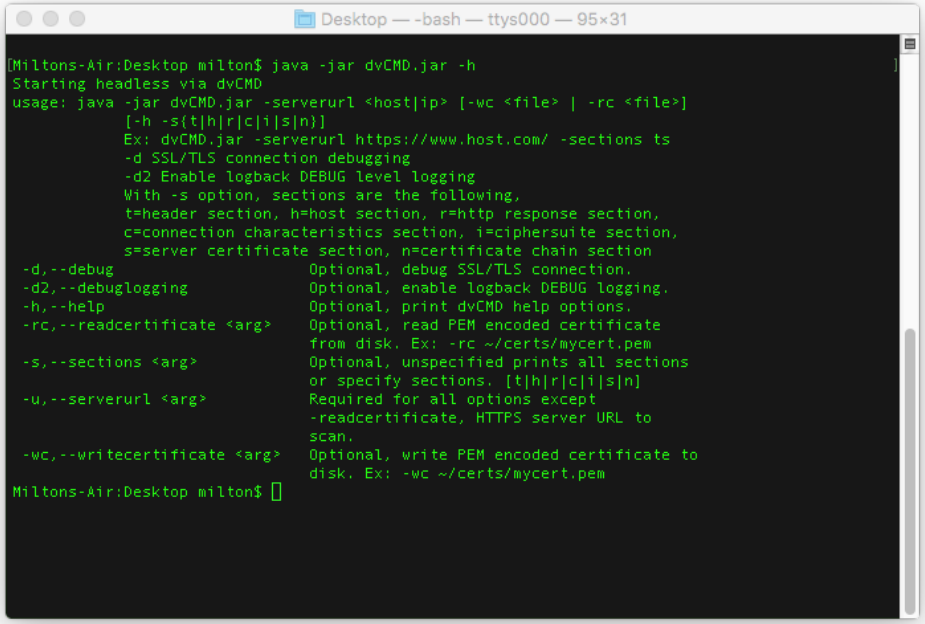
1) Provide a URL and Click

2) Report is generated

3) Save report to disk

Easy as that. Adapt as needed.

DeepViolet Command Tool



1) Try a command line like this,
java -jar dvCMD.jar -serverurl https://www.google.com/ -s hrcisn

2) Report is generated

3) Redirect output to file or pipe to **grep** to search certificate metadata

Easy as that. Adapt as needed.

Additional References

OWASP Project Site:
https://www.owasp.org/index.php/OWASP_DeepViolet_TLS/SSL_Scanner

GitHub Site: https://github.com/spoofzu/DeepViolet

Download: https://github.com/spoofzu/DeepViolet/releases

Follow Online: twitter, @deepvioletapi

;o)