Meeting 101

Overview/Agenda

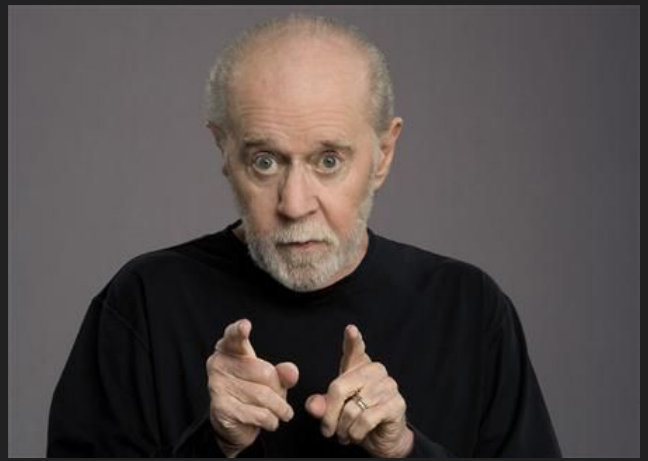
Welcome

SecDSM.org @SecDSM

Get on #Slack - secdsm.slack.com

Obligatory Disclaimer

Content delivered (or generated) at SecDSM is unrated. You have been warned!



Thanks to:
PFG for Gravitate
Casey’s for Pizza

New/Old Stuff

Website Automation
Suggestions?
We need speakers

Upcoming Events

	Event	Information	Date/Time/Location
	SecKC Roadtrip	http://seckc.org/	9/13 Meet at the Target parking lot at the West Glenn shopping center in the south west corner at 1:00pm and will leave at 1:15pm
	CornCon 2016	http://corncon.net	9/17 - Davenport, IA
	BSIDES STL	http://www.securitybsides.com/w/page/99388307/BSidesSTL%20-2016	9/17
	DerbyCon	https://www.derbycon.com/	9/21 - 9/25 - Hyatt Louisville Kentucky
	Secure Iowa Conference	http://secureiowaconference.com/	10/4 - Ankeny, IA

SecDSM - status update

501c - Non Profit
Paperwork in-progress
Board/Leadership formation in-progress

Let’s get going

Beating ssllabs and securityheaders.io - Brandon Murphy (Tool Talk) - 6:10

Consuming SSLLabs.com API - Ben Schmitt (Tool Talk) - 6:30

Security Onion – A quick start guide (Aaron Tekippe) - 7:00

SSLLabs.com API

Automate Scores and Report on Changes

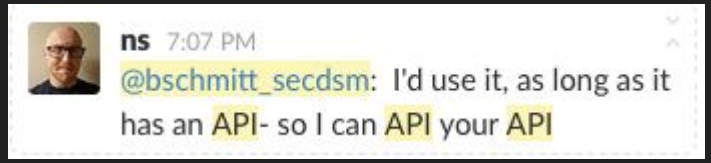
SSLLabs.com

Free service to scan a public website and provide a “grade”. Brandon spoke about getting your site clean - how do you keep it clean?

Use the API and schedule/compare scans

What’s the cost, license and capabilities?

Rules of the API Road



The SSLLabs API has a terms of service: https://www.ssllabs.com/downloads/Qualys_SSL_Labs_Terms_of_Use.pdf

Key points: no cost, no screen scraping (use the API for automation), give credit, you cannot charge, you must display their API info properly, use wisely.

An NS clause: *you may not distribute, proxy, or otherwise make the API available for access or use by any person or entity other than your authorized employees, including but not limited to acting as a service bureau or developing a competing product or service offering.*

API end points

```
API_URLS = [
    'https://api.dev.ssllabs.com/api/v2/',  # dev
    'https://api.ssllabs.com/api/v2/'  # stable
```

These are unauthenticated - no API key/secret needed

There are existing projects to use the API

https://github.com/ssllabs/ssllabs-scan/blob/stable/ssllabs-api-docs.md

https://www.ssllabs.com/projects/ssllabs-apis/index.html

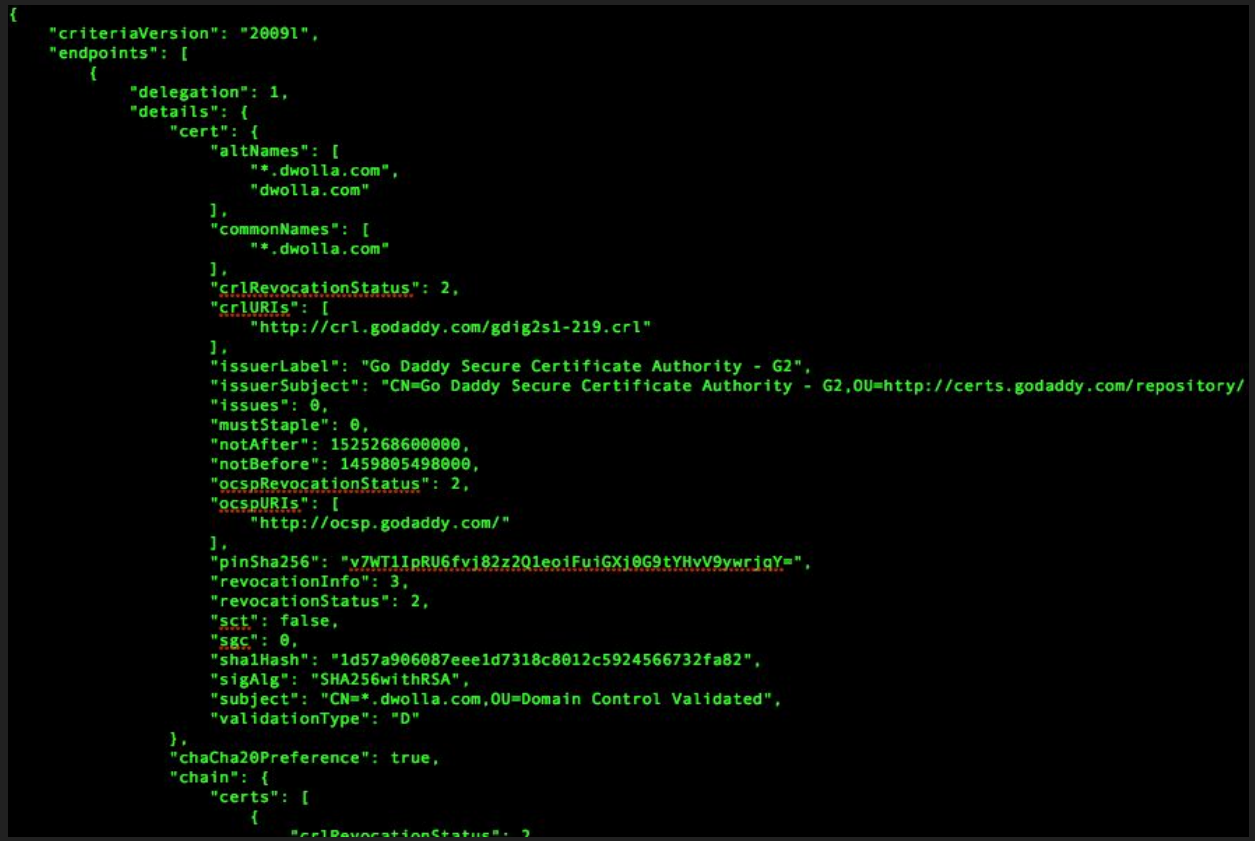
https://github.com/takeshixx/python-ssllabs

We will focus on the features I've stubbed in the python-ssllabs tool (and will contribute back via a PR if the author is willing to have them)

APIs => JSON

Hierarchical file format:

Parsing for the grade?



Key info for daily comparison

```
json_str = (json.dumps(info, indent=4, sort_keys=True))

resp = json.loads(json_str)

print "\nGrade: " + (resp['endpoints'][0]['grade'])

print "IP Address: " + (resp['endpoints'][0]['ipAddress'])

print "Host: " + (resp['host'])

print "Start Time: " + str((resp['startTime']))
```

Algorithm

1. Run scan against target - get JSON feedback - cache in data structure, write copy to disk.
2. Get previous scan value (the grade) from sqlite db
3. Compare values - if the same, your job is done and no alert. If different, alert and diff JSON files on-disk and send relevant diff info in email
4. Commit new scan to sqlite db

Demo

That’s it - questions?

I’ll post this as a Github GIST soon and work with the author if he/she is interested in the functionality (German InfoSec professional)